

# Railway Age

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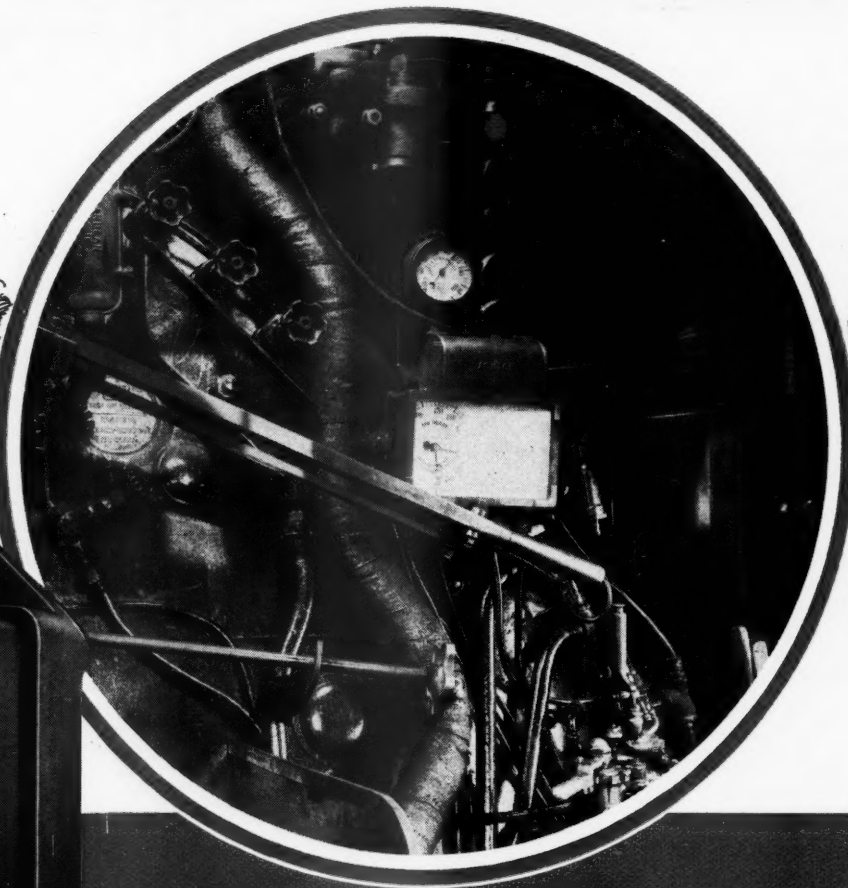
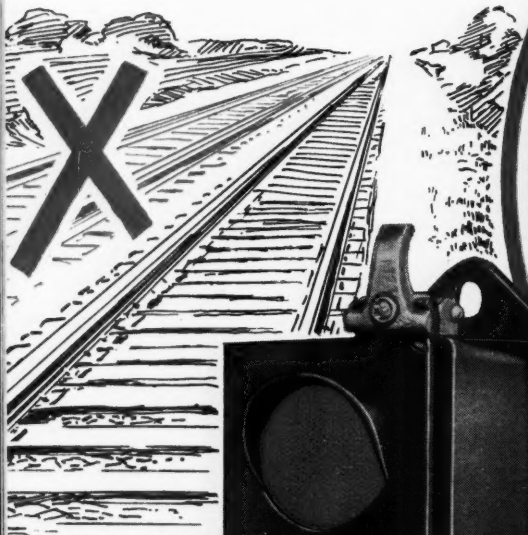
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# The Week at a Glance

**I. C. C. BEFOULS ITS NEST:** If the Commission is going to fix rates on political considerations, then what is the purpose of that body's rate-making power? The leading editorial herein discusses critically and analytically the I. C. C.'s majority decision in the Southern governors' rate complaint.

**FLORIDA WHIZZERS:** The two roads which are competing for the Florida passenger trade from the North Atlantic area did themselves proud in the inaugural festivities, on December 1, of their new daily coach streamliners — as is revealed in a news account herein. And the F. E. C. did a similar thorough job with its companion train in Florida. If there was a time (as we fear must be admitted) when the railroads had the "order-taker's" attitude toward their selling job, that period is rapidly becoming ancient history.

**CAN'T MERGE AND FIRE TOO:** Even though statutes give the I. C. C. no power to prescribe employment policies for the railroads, the Commission can give itself such power by making stipulations regarding treatment of employees in connection with granting authority for railroad consolidation. So the Supreme Court has ruled in the suit of the Rock Island, which sought to force the I. C. C. to leave out labor-protecting conditions in its authorization for the merger of the C. R. I. & G. with its parent.

**SAFER AIR TRAVEL:** For six successive months now air travel each month has surpassed every previous month. October traffic (70 million revenue passenger-miles) was 39 per cent above last year and express traffic (530 million lb.-mi.) was up 24 per cent. Improved safety gets the credit for the vast increase in business, the air lines having now gone more than eight months without so much as injuring a customer. Passenger-miles per passenger fatality have jumped from 22 million last year to 80 million this year — a remarkable record in view of the fact that so many mishaps are fatal in the air which, in surface transportation, would endanger no one.

**GIT THEM AUTO CARS HOME:** The Car Service Division has issued some pretty strenuous orders to get automobile cars returned more promptly to the originating lines. Cars equipped with loaders must be sealed and shot back pronto. Another Car Service circular indicates that demand for 50-ft. box cars is pretty widespread and that the supply is "somewhat limited."

**THEY DON'T KID EASTMAN:** One by one, persons in positions of authority are getting the courage to speak out openly against the fraud of alleged "cheap" waterway transportation. None of them, however, has done so more forthrightly and to the point than Commissioner Eastman in the Tennessee river oil rate case reported in the news pages herein. The Tennessee

river has recently been made navigable by those suckers, the taxpayers — and now Big Business, in the shape of the oil companies, is moving in to pocket the "savings" from the "improvement." Mr. Eastman observes that it would be cheaper for the taxpayers to give these subsidies to these shippers by government-supported low rates by rail, rather than by spending the money on waterway construction.

**WHERE TO FIND MAGNANIMITY:** Harry Woodring, Kansas politician, who is Secretary of War, wanted to spend 31 million dollars of federal money to provide "flood protection" for 9 million dollars worth of Kansas land (which floods were damaging at the rate of less than 1/2 million dollars a year). Senator Clyde Reed called a meeting of the farmers (prospective beneficiaries of Woodring's largess) and laid the facts before them, asking them whether they could countenance such uneconomical expenditure, even though they were to be on the receiving end. And the farmers were sufficiently intelligent and *magnanimous* (in the literal meaning of that word) that they voted almost to a man against the proposal. This heartening story — and an equally disheartening one about Senator Reed's similar efforts to arouse a little magnanimity on the part of industrial traffic managers — is related in the leading article herein.

**INTERESTING SMALL DIESELS:** Small Diesel-electric switchers, in service on the Rock Island and described in an illustrated article herein, are showing some impressive economies over replaced steam power. The engines use only 17 1/2 cents worth of fuel per hour and their total savings, compared with replaced power, are \$2.30 an hour. Despite their size (44 tons, 360-hp.), the switchers can, at low speed, develop almost 25,000 lb. of tractive force.

**CANADA'S RRs. AND WAR:** The C. N. R.'s Research Director Fairweather is one of those speakers who (something like Joe Eastman) never talks but he says something new and worth hearing, and the address of his published herein is no exception. He views the present war as a struggle hinging largely on two groups of natural resources — those of Canada and those of Russia; and he sees the nations which rely on Canada away in the lead precisely because Canada has what, from a peace-time view, are regarded as "surplus" railway facilities — with Russia suffering from transport grievously inadequate even in times of peace.

**NOVEMBER EMPLOYMENT:** While there was a seasonal decline in the number of railroad men working in November, as compared with October, the jobs being provided were 8 per cent above those in November, 1938. Particularly noteworthy was the increase of 16 per cent over last year in the number of men working in the maintenance of equipment and stores departments.

**NO HEADWAY VS. TRUCKS:** Those of our readers not of naturally sanguine disposition had perhaps just as well skip the story herein headed "Railroads Still Losing Ground to Competitors" — because it is not anything cheerful to read. The article is concerned with a report by the I. C. C. on the volume of business the railroads lost to competitors in 1938 — and it amounted to 635 million dollars. Bad as that is (and we doubt that the I. C. C. estimate tells the whole story of these losses) the fact that such losses are not being arrested is vastly more disturbing.

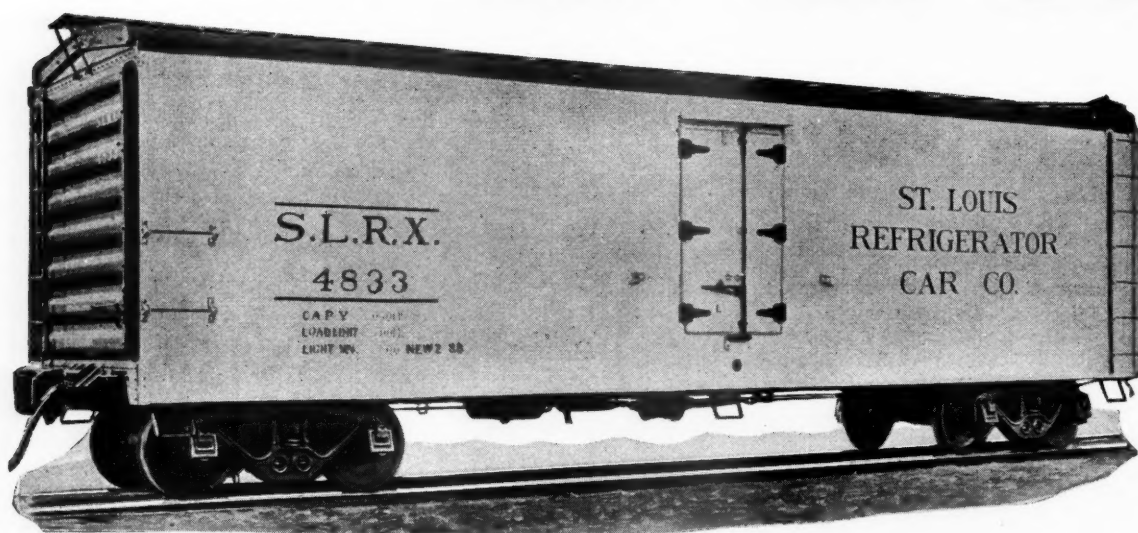
**OUR FINGERS CROSSED:** As we go to press we see the headlines in the papers about the big meeting of the manufacturers in New York — and such expressions as "free enterprise" and the "American system" greet the eye. We believe in these principles just as firmly as the manufacturers do — a lot more firmly than some of them. What we are waiting to see is the extent to which they propose to effect America's salvation by works rather than by mere platitudinous declarations of faith; whether, in short, the kind of treatment they demand from the government for themselves they are willing to have extended also to the railroads. Not a few of these condemners of government "paternalism" as far as their own businesses are concerned are out-and-out socialists in transportation — and they won't be able to laugh it off, either.

**HIGH POINT CROSSINGS:** To eliminate grade crossings in High Point, N. C., the Southern depressed its tracks for 2 miles through the heart of the city. During the course of the job it encountered a tough problem of drainage — its method of solution, as well as the project as a whole, being described in an illustrated article in this issue.

**TRUCK-PROTECTIVE RATES?:** Shall railroad rates be kept far above costs of railroad service against the railroads' desires, and to the loss of shippers and consignees, merely in order to allow a high-cost competitor to stay in business? That is the interesting demand made on the I. C. C. by attorneys for tank-trucking outfits operating between California and Arizona, as related in the news pages herein.

**THE LUCKY UTILITIES:** Judging from the newspaper stories coming out of Tennessee these days, the tax-paying public in that section is rapidly learning that socialistic electric power has its drawbacks. The TVA has bought out private utilities with which it was competing — and so other taxpayers have suddenly and dramatically had thrown upon them the job of finding elsewhere the \$3,000,000 in taxes these utilities used to pay. "Lucky utilities" we call them, because when the politicians use taxpayers' money to put them out of business, the taxpayers immediately get wind of what is going on.

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## RAILWAY AGE

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# And Now the Commission Bows to Politics

There can be only one good reason for any government regulation of transportation under present conditions in this country. This is that it will promote the public interest by causing more fair and economically sound competition between sections, communities, shippers and carriers than would prevail without it. Railway regulation originally was adopted to control the railways because they were considered to have virtually a monopoly of transportation. It is no longer needed to control a monopoly because government-aided development of carriers by waterway and highway has made transportation our most highly competitive industry. Therefore, for the suspicion, or conviction, to become prevalent that regulation of competition, as well as government aid to some carriers, is being dictated by political considerations would soon destroy all intelligent belief in regulation and in the desirability of its continuance.

A recent decision of the Interstate Commerce Commission very plainly indicates that in one important case it has allowed itself to be swayed entirely by political considerations. This is the case (No. 27746, State of Alabama, et al. v. New York Central Railroad Company, et al.) involving certain interterritorial rates between eastern and southern territories. The charge that the decision was dictated by politics is made in almost so many words by Chairman Eastman in his dissenting opinion. Whether they agree with him or not, all familiar with the personnel and work of the Commission will agree that Mr. Eastman is its ablest member, that he is honest almost to the point of fanaticism, and that he would not make the charge of "politics" unless sure it was well founded.

### A Case Political from Its Inception

And yet Mr. Eastman flatly calls the controversy "a political issue" that "had been decided in advance and without regard to the record by many men in public life of high and low degree," and sharply criticises the

Interstate Commerce Commission's decision as unwarranted by the facts.

The proceeding was begun by a complaint filed by the governors of southern states—all that was needed to show it was political from its inception. They claimed that freight rates in the south were too high as compared with rates in the "north"—meaning the territory east of the Mississippi and north of the Ohio. Their claim subsequently was echoed in Congress by representatives from the south; and representatives from western states voiced similar complaints about rates in the west, evidently intending, if regulation of freight rates was to be made a pork barrel, to demand their share of the pork. And, significantly enough, all five of the commissioners who voted for the decision are from the south and far west—Caskie of Alabama, Splawn of Texas, Rogers of Tennessee, Aitchison of Oregon and Lee of Idaho.

The complainants demanded rates as low "mile for mile" in the south as in the east—in other words, rates as low per ton-mile. They contended that higher rates in the south put producers in that section at a disadvantage. They even contended that southern railways can afford to make as low rates as eastern railways because their unit costs of operation are no higher—a contention the southern lines vigorously combatted.

This paper does not intend to engage in any technical discussion of the various comparative and competitive rates, because the facts showing that southern and western lines cannot afford to make as low rates as eastern lines are plain beyond all reasonable peradventure. In a country throughout which, as here, the wages and prices that railways must pay are virtually the same, density of traffic is the decisive factor in determining their unit costs of operation and what rates they can afford to charge. In making reasonable comparisons of conditions in the east, south and west it is necessary to omit the statistics of the railways operating in the Pocahontas region. Their enormous density of coal

traffic sharply differentiates them from all other groups of railways; and, anyway, in statistical reports they have sometimes been included in eastern and sometimes in southern territory.

In 1938 the traffic density of the eastern lines—that is, tons carried one mile per mile of line—was 1,942,000 ton-miles and their freight earnings per mile \$19,600. Their average revenue per ton-mile was 1.009 cents. The traffic density of the southern roads was 993,480 ton-miles and their freight earnings per mile \$10,067—but slightly more than half as large as those of the eastern lines. Their average revenue per ton-mile was 1.013 cents. The traffic density of the western lines was 840,550 ton-miles and their freight earnings per mile \$8,743—much less than half those of the eastern lines. Their average receipts per ton-mile were 1.040 cents.

In proportion to density of traffic the general levels of rates are lower in both the south and west than in the east.

### Traffic in East, South and West

Has the business and development of the south and west been hindered by the rates prevailing in these territories? Between 1920 and 1929 the freight traffic of the eastern lines increased 2.3 per cent, that of the southern lines 8 per cent, and that of the western lines, 10½ per cent. Between 1929 and 1938 the traffic of the eastern lines declined 42 per cent, that of the southern lines 30 per cent, and that of the western lines 31 per cent. In 1938 the traffic of the eastern lines was 41 per cent less than in 1920; that of the southern lines 25 per cent less, and that of the western lines 24 per cent less. Certainly these figures do not indicate that differences in the general levels of rates have retarded development and production in the south and west as compared with the east—and neither do any other available data. Freight rates are a small percentage of the prices of most commodities, and it has been demonstrated over and over again that differences in them usually are a small factor in the competition of different territories.

This paper has never participated in the adulation of the Commission as an "expert, impartial, non-political and constructive body" which has been indulged in so often by persons self-interestedly hoping thereby to curry its favor. Extremely few of its members ever have had any expert knowledge of their work when appointed and most of them have acquired little. Repeatedly it has shown unfairness and lack of intelligence by refusing advances in rates when business was good, prices were high and traffic could stand them, only to grant entirely inadequate advances after business and prices had declined—in other words, at the worst possible time. Its chronic lack of any constructive policy has contributed greatly toward the present condition of the railroad industry. And now, by dividing on sectional lines, and making a decision plainly

intended to placate the most politicians possible—doubtless to assure reappointment of its members voting for the decision—it has invited and justified the charge that it is a *political* body.

### Political Regulation of Transportation Competition

Having made one shameful political decision, the Commission and the country will be fortunate if it is not overwhelmed with political pressure for more of the same kind demanded for similar reasons. And if it continued to make them it would itself soon abolish the only excuse for its continued existence. Unregulated competition by the railways formerly caused unfair discriminations. Doubtless unregulated competition by all present carriers would cause many more of them. But discriminations caused by unregulated competition could not possibly cause any more harm than unfairly discriminatory regulation of rates dictated by politics. Without regulation all competing carriers would at least try to protect and build up business in their own territories, with the result of maintaining approximate equality between them; but a political regulating body would inevitably, as in this instance, use the power of government to build up the territories it believed had the most political influence at the expense of those having the least political influence.

The existence of the present transportation situation in this country is principally due to politics—that is, to the abuse of governmental power for the purpose of building up some carriers at the expense of others. It exists principally because business interests wanting the advantages of subsidized and unregulated transportation have exerted more political pressure in Washington and at the state capitols than those over whom they have sought these advantages—that is, than the regulated and unsubsidized railroads and the agricultural and business interests that must depend principally or entirely on the railroads for transportation. Now that the Interstate Commerce Commission, yielding to political pressure, has begun abusing its governmental power to favor some sections at the expense of others, it is evident that a more determined fight than ever will have to be made to drive political favoritism out of government transportation policies.

### Kansas Farmers Set Business an Example

Do the people favor government policies dictated by political pressure regardless of their nationwide economic effects? Not when they are correctly and adequately informed—as was strikingly illustrated by an incident extemporaneously narrated by United States Senator Clyde M. Reed of Kansas in a recent speech in Chicago and since narrated by him in writing. The Rivers and Harbors bill passed by the House at the last regular session of Congress provided appropriations of 82 million dollars. The Senate Committee on Commerce (principally a waterway committee) in-

creased this pork barrel to 407 million dollars—including an appropriation of 31 million dollars for "flood control" in the Verdigris valley in Kansas, which was favored by Secretary of War Woodring, a former governor of Kansas.

Senator Reed got a meeting of about 700 of his constituents held in Fredonia, of whom 80 per cent were farmers. He read to them a report by the Board of Army Engineers showing that this 31 million dollars would be spent for the protection of land worth less than 9 million dollars, and would result in a permanent annual carrying charge of \$1,266,000 to prevent an average annual flood damage of \$426,400. He emphasized that such wasteful expenditures could not be made in Kansas and prevented in the rest of the country; that they could not be continued without bankrupting the government or causing further huge increases in everybody's taxes—and the audience, especially the farmers, voted almost unanimously to support him in opposing the proposed expenditure in his own state.

#### Expenditures—Government and Business

A real showdown regarding the kind of policies of government spending and affecting transportation that are pushing this country toward ruin is long overdue. Nothing could be more silly than remarks often emanating from New Deal inner circles in Washington which, in effect, challenge those advocating balancing of the budget to state specifically what government expenditures they would reduce. The managements of the railways reduced their operating expenses from 4½ billion dollars in 1929 to 2¼ billions in 1933; and, in spite of later government-compelled advances in wages and prices, their operating expenses in 1938 were less than 2¾ billion dollars. They also reduced their capital expenditures from 854 million dollars in 1929 to 104 million dollars in 1933; increased them to 510 million in 1937, and again reduced them to 227 million in 1938. Railway operating expenses and capital expenditures combined were almost 5½ billion dollars in 1929 and less than 3 billion in 1938. Why talk as if government expenditures cannot be reduced when private management of railroads and other industries, under the pressure of necessity and in spite of political interference, actually have made such huge reductions? The way to reduce is to reduce—and all along the line, in the same way that business management does when earnings decline.

It is replied that the reduced expenditures of industry necessitated the increased expenditures of government—as if the reduced expenditures of industry were necessarily permanent. Increased government expenditures for relief were necessary; but most of the increased government expenditures have been just like those proposed in Kansas—hugely excessive in proportion to the economic value of their objectives. And by diverting earnings and capital from private industry they have helped prevent the revival of economically sound spend-

ing by the railroads and other industries *that would have occurred under rational government policies*. You can't take billions in taxes from private industry and have the same money spent by private industry in paying wages and buying materials. And you can't take billions of capital out of the market and "invest" it in grossly unproductive public works and have that same capital invested by private industry in efficient means of production and transportation.

#### The Matter is—Politics

The matter with this country is the most corrupting and destructive kind of politics—politics causing vast uneconomic government spending; politics dictating uneconomic wages and prices; politics preventing revival of private investment; politics pervading all government transportation policies, including now those of the Interstate Commerce Commission, which was given its power largely to prevent political regulation of transportation; in short, politics preventing such increases of the national income as almost always occurred before the last decade, and thereby undermining the welfare of every man, woman and child of the present generation and generations yet unborn.

This infamous and ruinous game of politics is being as selfishly and destructively played by some Big Business interests as by most politicians. It is understandable that the one-third said to be "ill-fed, ill-clothed and ill-housed" should support destructive economic policies favored by radical politicians pretending they are trying to "help the poor"; but God only knows why many business men supposed to be intelligent and professing to be opposed to the trend toward socialism are so blind to their own long-range interest and so lacking in every semblance of public spirit as to support them.

#### The N. I. T. League Declines a Challenge to Public Spirit

Senator Reed directly challenged the National Industrial Traffic League representing Big Business, to which he made his speech, to show "as much patriotism and unselfishness and devotion to the public interest as the farmers down at Fredonia, Kansas." He added that he feared it would not—and it did not. It again went on record against waterway tolls and regulation of inland waterways—the equivalent of favoring continuance of huge economically indefensible government expenditures on waterways. "The body I am addressing," said Senator Reed, "contains many able traffic men who represent cities on the inland rivers, and are devoted to the interests of their company, their city, or their Chamber of Commerce, but don't care how much money the government spends for *their* benefit. They are, as a whole, opposed to the extravagance and waste of the present administration, so long as this extravagance and waste is for the other fellow. But when it comes to extravagance and waste for their particular community, 'that is all right.' " And a majority of the League's



members voting promptly voted to show that he knew them, "all right."

And that is what is the matter with this country. Most persons of any influence show they don't give a damn for its long-range welfare if they consider it con-

trary to their own supposed self-interest. And so they play their own games of politics for their own rackets, and in their comfortable—or luxurious—homes, offices and convention halls patriotically abuse the "one-third that are ill-fed," etc., for doing the same thing.

## A Specific Program for Recovering L. c. l.

Reprints of the series "What Will the Traffic Bear?"—articles 1-39 inclusive—are available at a price of 35 cents and may be obtained by addressing Railway Age, 30 Church Street, New York, so long as the supply lasts.

\* \* \*

The changes recommended in the "preliminary report" of the A. A. R. Special Merchandise Committee (*Railway Age*, November 25, page 831), while helpful, do not come to grips with the fundamental problem. They are aspirin tablets given to a man who needs the attention of a first rate surgeon.

Everybody knows that merchandise carloadings today are materially lower than in the early 'Twenties. They have utterly failed to respond to the pick-up in business. Merchandise loadings were up 1.6 per cent in October, but truck merchandise traffic was up 25 per cent. Truck traffic has increased 51.3 per cent since 1936 and, if it were not for a shortage of equipment, the truckers would be handling even more tonnage than they are.

The merchandise figures do not tell the whole story. **For every carload of merchandise the trucks are getting, they are capturing at least an equivalent tonnage of carload traffic** on a back-haul basis—because trucks move only 5 per cent empty as compared with 30 per cent empty for railroad cars. This **back-haul diversion from railroads to trucks is increasing just as fast as merchandise diversion**, but it is not so noticeable in carloading statistics, because carload tonnage by truck does not constitute such a large percentage of total carload traffic.

Freight forwarders as they now operate are not the key to the railroads' difficulty. They handle only 1/12 of the total merchandise traffic. Trucks handle 1/2 and railroads retain only 5/12, composed largely of the least-desirable, lowest-revenue-producing, and highest-cost traffic. For example, forwarders handle only 1/6 of total rail-plus-forwarder tonnage, but their revenue is 1/3 of the aggregate merchandise revenue of both forwarders and railroads. Forwarders select high-rated, volume traffic, and load 15 tons per car. The railroads load only 1.87 tons per car.

The railroad problem with regard to merchandise is not merely the loss of tonnage and revenue, but—what is possibly more important—the light loading and consequent high cost of the traffic left to

them. Forwarders offer no solution, because, if they should take over at present rates the 5/6 of merchandise traffic still handled by rail, present modest forwarder profits would be transformed into a thumping deficit. The seeming lower costs of forwarders than railroads in handling merchandise stem more from their pick-and-choose status than from genuine greater efficiency.

It is obvious that merchandise traffic is suffering from a chronic surplus of facilities and it is equally obvious that this surplus has been induced by railroad pricing based on the assumption of a monopoly which has disappeared. This surplus is the most acute problem facing the railroads, because out of it arise both losses to competitors and absence of profits from business remaining on the rails.

It is believed that the existing chaotic condition would largely disappear if the railroads would:

(1) Reduce all of their classification ratings on traffic that will load 20,000 lb. in a 1,000 cu. ft. truck body to not higher than third class.

(2) Increase all l.c.l. rates that are now less than fourth class to fourth class—then add a reasonable charge for pick-up and delivery service to all of the rates that are less than third class after such revision, and apply this basis to all such traffic.

(3) Apply the present third class rates to the revised third class traffic except where the revised fourth class (to include a reasonable pick-up and delivery charge) would make higher rates—then in such instances apply the higher revised fourth class basis.

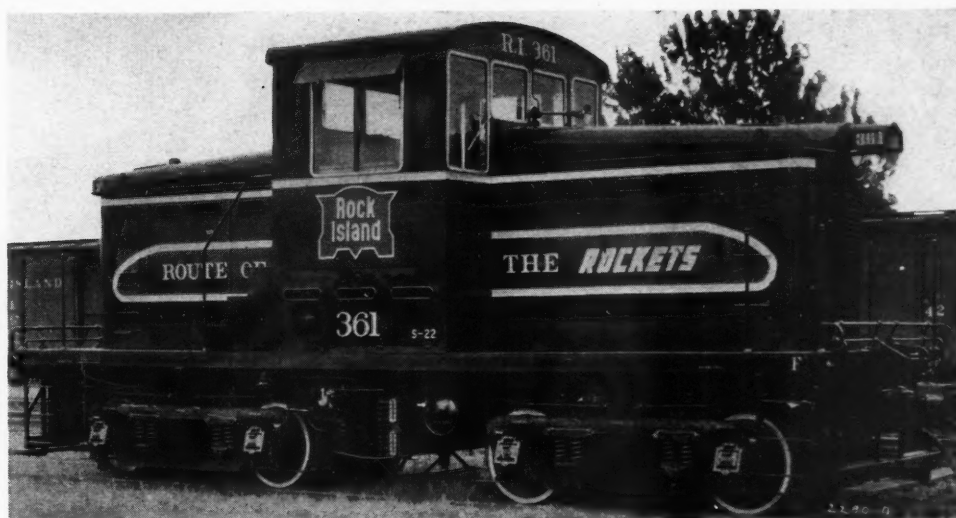
(4) Rate all other merchandise traffic of less density than that indicated in (1) above primarily according to density and extend complete free door-to-door service to all traffic.

(5) Establish lower rates on quantity shipments, roughly reflecting the lower unit cost of handling the greater quantity.

These simple steps should recover a large volume of traffic, greatly reduce unit costs of handling and improve net revenues. After this traffic is restored to the railroads, it will then be time to consider how merchandise traffic can most efficiently be handled—whether by pooling or otherwise.

If, in the corrective process, the investments of any railroads in existing methods of handling are threatened, other railroads might consider contributing toward a "jack pot" to compensate the losers, in consideration of the infinitely greater gain that all would realize from a comprehensive solution to this problem.

Forty-Four-Ton Diesel-Electric Switcher Built by the Davenport Besler Corporation



## Rock Island Gets Good Results With 44-Ton Diesel Switchers

**T**HE Chicago, Rock Island & Pacific now has in regular service two 44-ton, 360-hp. Diesel-electric switchers, built by the Davenport Besler Corporation, Davenport, Ia., and powered by dual Caterpillar 180-hp. four-cycle Diesel engines, with Westinghouse electric transmission to each pair of wheels in the two four-wheel trucks. One of these locomotives has been used for double-shift industrial switching at Muscatine, Ia., since February, 1939, and the other in combination switching and branch-line service at Atlantic, Ia., since last August. Performance records with the first locomotive over a period of 10 months indicates a combined maintenance and operating cost of only \$1.674 per hour, which may be compared with \$3.98 per hour for equivalent steam operation. Even on the basis of but one 8-hr. shift a day and 300 days a year, this means a direct saving of \$5,535 a year, one reason the Rock Island has recently ordered 10 more locomotives of the same size and type.

Fuel savings with the new 44-ton Diesels are impressive, as they use, on the average, only about  $3\frac{1}{2}$  gal. of Diesel oil per hour at a cost of five cents per gal. Other advantages claimed are high availability, low carrying charges and low maintenance; rapid acceleration and easy handling; quiet and clean operation, and a design which incorporates the builder's extensive experience combined with that of the various specialty manufacturers and railroad engineers. Still another feature is the employment of general accessories and equipment in standard use on other Rock Island locomotives, thus avoiding the necessity of carrying added stores inventories. Replacement or repair parts for the Diesel engines are readily obtainable at relatively low cost from any of the conveniently located Caterpillar distributors.

### Description of the Locomotive

The Davenport Besler 44-ton Diesel-electric locomotive has the following general dimensions: length over couplers, 33 ft. 10 in.; maximum height above rail, 14

Two Davenport Besler locomotives, driven by dual Caterpillar 180-hp. engines with Westinghouse electric transmission, show large savings in operating cost

ft.  $1\frac{1}{2}$  in.; width over all, 10 ft.; wheel diameter, 33 in.; weight on drivers 88,000 lb. It is designed to negotiate curves of 75 ft. radius and develop 24,800 lb. tractive force at 2.5 m. p. h.; 15,600 lb. for one hour at 5.5 m. p. h.; 11,800 lb. continuously at 8 m. p. h.; and 2,700 lb. at 30 m. p. h., using a total gear ratio of 75 to 13.

The locomotive underframe is made of heavy structural-steel shapes and plates thoroughly braced, reinforced and welded into one strong unit, with provision for mounting the engine and generator sub-base on the center sill. The front and rear end sills are heavy channels with plates welded in to form a box beam construction. Association of American Railroads specification draft gears are installed and couplers with 6-in. by 6-in. shank and 11-in. head.

The individual truck wheel base is 7 ft. and the truck center spacing, 16 ft. 6 in. Commonwealth cast steel side frames and bolsters with center plates cast integral, are applied, the center plates being lined with replaceable, hardened, wear plates. Wear liners are also installed at the pedestal jaws. Anti-slewing brackets on the body bolsters restrict truck movement to  $7\frac{1}{2}$  deg. on each side of the center line. Bolster center locks prevent separation of the trucks from the underframe in case of derailment. The wheels are 33 in. rolled steel with A. A. R. standard 5-in. by 9-in. journals and friction bearings.

Dual power plants are installed in the locomotive, the



two Diesel engines, furnished by the Caterpillar Tractor Company, Peoria, Ill., being of the Model D-17000, four-cycle type, with eight cylinders,  $5\frac{3}{4}$  in. bore by 8-in. stroke, and developing 180 net horsepower per engine at 975 r. p. m. Caterpillar governors and fuel pumps are installed, as are also Donaldson air cleaners and Purolator and Michiana lubrication oil filters. The capacity of the lubricating oil circulation system is 40 gal. for each engine. Burgess exhaust snubbers are installed and a single engine exhaust is located near the forward end of each hood.

Two Caterpillar engine-mounted radiators are used, the capacity of the combined cooling systems being 70 gal. Standard belt-driven engine-mounted fans provide the air for the radiators. Two overflow pipes for each radiator extend from each side to the top of the radiator and have cones at the bottom to take a  $\frac{3}{4}$ -in. hose for filling. Radiator shutters are operated manually from the cab.

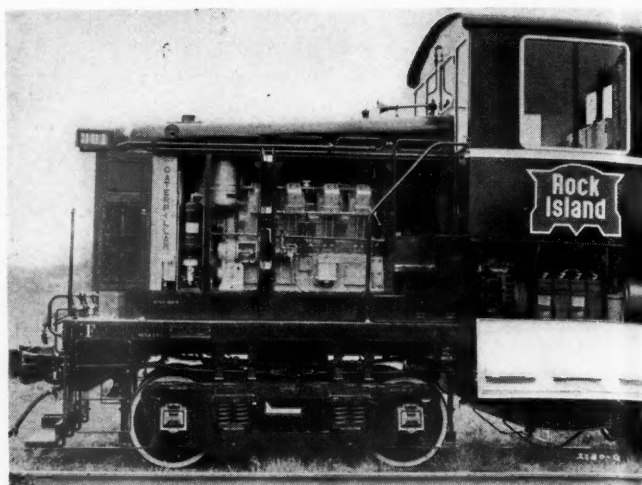
Two kerosene heaters are installed to prevent freezing of the cooling systems, and, also, to keep the engines warm for easy starting; a heater is located back of each radiator. The storage tank is large enough to hold sufficient kerosene for 24 hr. operation.

#### Principal Features of the Electrical Equipment

Two Westinghouse single-bearing type 184-A-4 electric generators with overhung exciters are installed. Excitation of the main generator fields is supplied by the exciter which in turn is excited from the battery. Engine loading is controlled by the Westinghouse differential system.

The generators are self-ventilated, with fans built in at the ends opposite the commutators. Armatures are carried on anti-friction bearings. Engine-starting windings are built into the generators. Class B insulation is used. The generators are arranged for direct coupling to the engine, with steel disc drives. Ammeter shunts for testing are installed at each generator. A 3-kw. auxiliary generator, belt-driven, is used for battery charging at all speeds.

Four Westinghouse Type 908-G-2 series-wound traction motors, complete with 75 to 13 gearings and gear



Partial View of the Locomotive With Side Doors Open for Inspection of the Engine, Batteries, Etc.

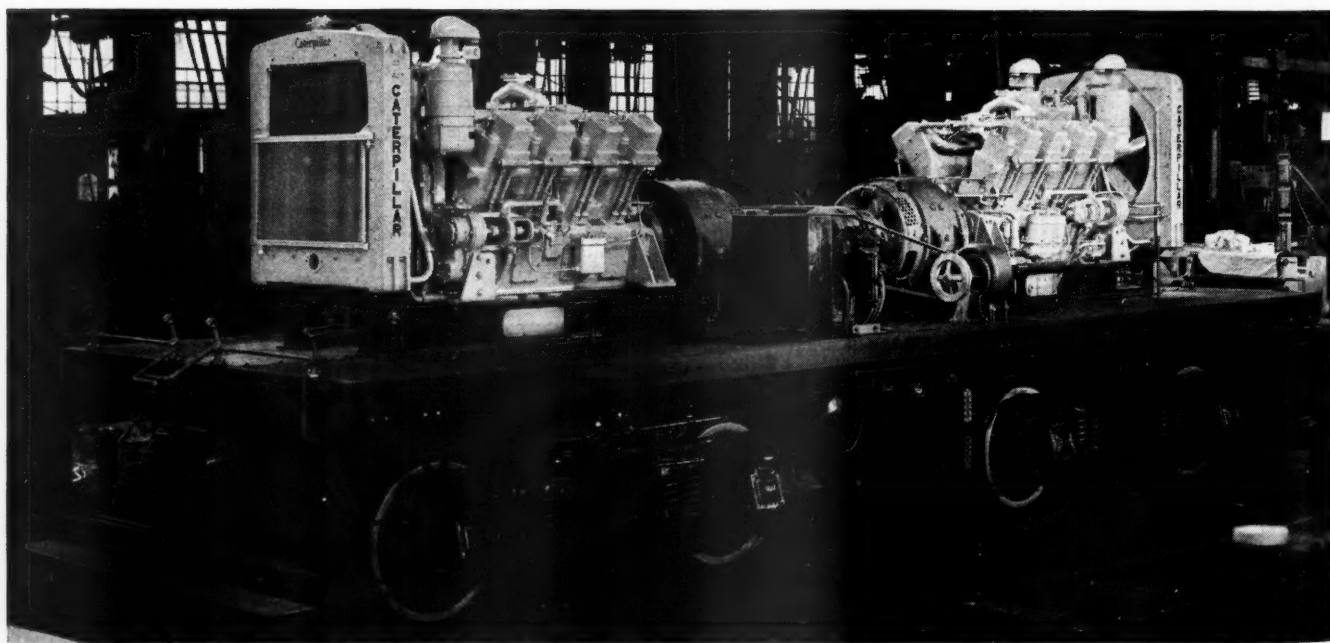
cases, are mounted on the trucks. Armature bearings are anti-friction and each motor is carried directly on the axles by bronze axle bearings, and on the trucks by spring nose suspension to the truck bolsters. Glass Weve insulation and high-temperature solder are used throughout. The minimum clearance with new wheels is  $3\frac{3}{8}$  in.

The single control station has remote magnetic control, with series-parallel and shunt motor combination forward and reverse. Transition from series to shunt and parallel is automatic. Speed is controlled by the manually operated engine throttle.

Two Sirocco fan blowers, one belt-driven by each engine, are supplied for motor blowing. These are connected by ducts to the center sills with arrangement such that the air blows through the center plates and truck bolsters and thence by flexible connection to the motors.

An Exide storage battery, of the 64-volt, 13-plate, 215-amp.-hr. type, is located under the cab deck, so as to be readily accessible for servicing and inspection through side drop cab doors.

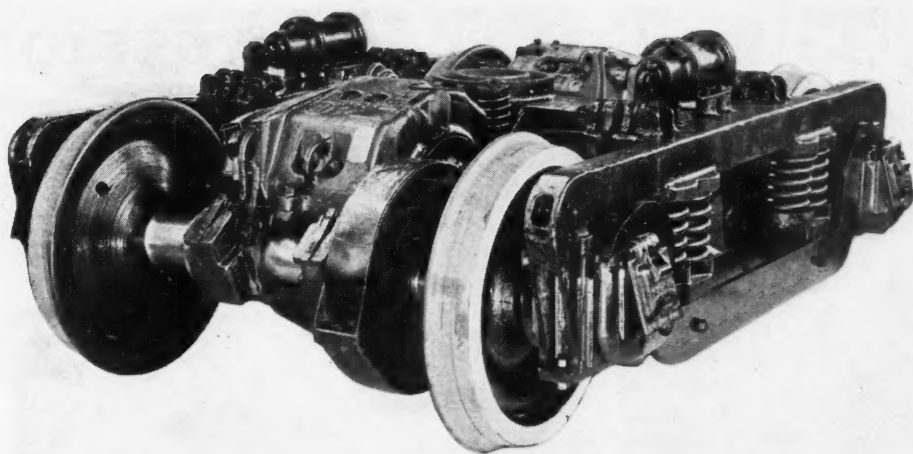
Westinghouse straight and automatic air brakes,



Dual 180-Hp. Caterpillar Westinghouse Diesel-Electric Power Plants Mounted on the Locomotive Frame



One of the Commonwealth Cast-Steel Trucks Equipped with Westinghouse Electric Drive to Each Pair of Wheels



schedule EL-14, having not less than 30,000 cu. in. reservoir capacity are installed. The two compressors are of the two-stage Gardner-Denver air-cooled type with 50 cu. ft. per min. displacement, each. A mechanical unloader is used.

The foundation brakes are of the fully equalized type with two cylinders per truck, giving equal brake-shoe pressure on each wheel and designed for a 60 per cent braking ratio. The spreaders between brake hangers are easy to adjust. The hand brake is arranged so that the brakes are applied on one truck only.

The roomy steel cab is designed for exceptionally clear vision. Two doors, one at the right back and the one at left front, have stationary sash, and latches are available to hold the doors open. Sliding steel sash are used at side windows, the front and rear windows being fixed. All glass is shatter-proof. Special equipment for the engineman's comfort and convenience includes sun visors, hinged for easy adjustment, air-push window wipers and a hot-water cab heater and personal tool box. Two metal-bound, fibre-back mirrors, 14 in. wide by 38 in. high, are mounted on the left side of the cab and adjusted in angular position so that the engineman has a clear view up and down the track to take signals from the switchman when his view would otherwise be obscured by cars being moved. The switchman can, in turn, see the engineman through the mirrors and know that his signals are being received.

The cab is well insulated with  $\frac{1}{4}$ -in. Masonite and  $\frac{1}{2}$  in. of hairfelt. Hard-maple decking  $\frac{3}{8}$ -in. thick is used. Hatches give access to all parts under the cab floor for inspection and service. Suitable hoods cover the engines and generators front and back of the main cab, and swing doors give convenient access to these parts for inspection and servicing. The doors are mounted on loose pins for easy removal. Baffles shield the generators from engine heat and are also installed between the fans and engines to protect the engines from dirt. All hood doors are locked from inside the cab and when the cab doors are locked, the locomotive may be safely left over night at outlying points without danger of tampering.

Front and back headlights, streamlined into the top radiator guard, are installed, being arranged so that either can be turned on or off, or dimmed. An instrument-board light, center dome light, a light for engine inspection under each hood, and a trouble light are installed. Marker-light brackets and Pyle-National outlets are applied.

The fuel tank, of 300-gal. capacity, is rectangular in section with suitable baffles installed and reflex-type

gages to indicate the fuel level. All fuel, oil and cooling-water lines are copper tubing with sweated fittings.

The blowers are belted by V-belts to an extension shaft and pulley at the back end of each main generator. On the side opposite the blower, the compressors are driven from this extension by means of multiple V-belts, with the compressor sheave-mounted closer to the generators so the maximum load will be closest to the shaft bearing. Auxiliary drives are so arranged that each end is entirely independent of the other, and the locomotive may be operated with one engine and one generator and still have all necessary auxiliaries in operation. The No. 1 engine-generator set furnishes energy for Nos. 1 and 3 traction motors and the No. 2 set supplies the Nos. 2 and 4 traction motors.

The sandbox is built into the underframe of the locomotive and so arranged that the sand is fully protected against the entrance of moisture. Graham-White sanders are installed with a King duplex sander valve.

Engine lubrication is force-feed. Lubrication of the electrical equipment is in accordance with standard Westinghouse practice. Where grease lubrication is used, standard Alemite fittings are applied.

A single-tone Model 66-B Buell horn is supplied. The bell, of Davenport-type with Transportation Devices internal rapid ringer, is installed under the main frame between the floor, footboards and truck.

The instrument board has one lubricating-oil pressure gage, one electric tachometer and one temperature gage for each engine, one ammeter to show battery charge, and two duplex air-brake gages as standard with EL-14 equipment.

The engine throttle lever, air-brake valves, sander valve, bell-ringer valve, etc., are all installed in accordance with the cab arrangement specified by the railroad.

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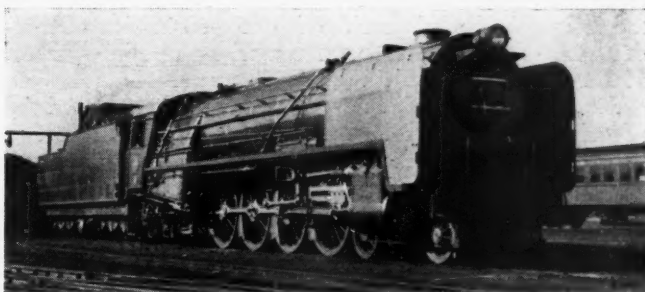


Photo By P. P. Stewart

A New Class GS Locomotive for Mixed Service Recently Installed by the South African Railways & Harbors Administration on its 3 ft. 6 in.-Gage System

# This Track Depression Imposed Severe Drainage Problem



The Revised Passenger Station Layout As Seen From the West

**B**Y depressing the tracks of the Southern for a distance of nearly two miles through the heart of the city, an extensive program of grade separation has been completed at High Point, N. C., which involved, among other things, the installation of a comprehensive sub-surface drainage system to combat an unusually wet subsoil condition. Carried out at a cost of \$1,108,755, this project embraced the construction of four overhead street bridges, with four additional structures planned for the future, and resulted in the elimination of eight grade crossings.

## Original Situation

Involved in this project is the double-track main line of the Southern between Washington, D. C., and Atlanta, Ga., which passes through High Point from northeast to southwest. Originally, four tracks extended through the city, including the two main lines and northbound and southbound passing tracks. Passenger and freight-handling facilities of the railway were situated immediately west of Main street, the principal business thoroughfare of the city. The passenger depot, a brick structure, is located on the south side of the tracks while the freight house, of part frame and part brick construction, was situated north of the tracks and slightly west of the passenger station.

Since the freight-handling facilities were served by two side tracks, there were a total of six tracks through the station area. Industries were served by spur tracks at various points and at Wrenn street a connection, involving also a wye track, was made with an affiliated line, the High Point, Randleman, Asheboro & Southern Railroad, which uses the Southern's passenger facilities at High Point. The railroad's right-of-way through the city is 200 ft. wide except in the vicinity of the old freight house where it is somewhat wider. For much of the distance through the city the tracks are flanked on both sides by parallel streets within the limits of the

Extensive grade separation project on the Southern, involving a cut 28 ft. deep, encountered exceedingly wet conditions

right-of-way lines, thus considerably reducing the width of property available for the track depression project.

Before the tracks were depressed, the grade of the main tracks through High Point was approximately at the ground level, involving a succession of shallow cuts and fills, and all through intersecting streets were crossed at grade. These included, proceeding from east to west, Kivett drive and Beaman, Perry, Hamilton, Wrenn, Main, Tomlinson and Oak streets. In the grade-separation project, overhead street bridges were constructed at Kivett drive, Wrenn street, Main street and Dalton street. Present plans envisage the future construction of bridges at Beaman, Perry, Hamilton and Willowbrook streets.

The City of High Point derives its name from the fact that it is the highest point on the North Carolina railroad, a leased line of the Southern through this district. Before the tracks were depressed, the highest elevation on the railroad was reached in the vicinity of the passenger station and from both directions this elevation was attained by grades ranging up to 1 per cent or slightly more. In view of this situation, elevation of the tracks was out of the question and track depression appeared to afford the only practical means of achieving a separation of grades through the city.

## Maximum Depression 26 Ft.

To effect the grade separation in this manner, it was necessary to depress the railroad grade a maximum of



26 ft. at Main street. This required the excavating of a cut having a maximum depth of about 28 ft. and a length of 1.8 miles, the new grade connecting with the existing grade at Hoskins street on the east and Grimes street on the west. The improvement that was effected in the track grades as a result of the project was considerable. Except for a short length of 0.5-per cent grade at each extremity of the project and at a point just east of Wrenn street, the depressed tracks are on a grade of 0.2 per cent against southbound traffic, the summit of the grade having been moved to a point near the west end of the project.

As a means of limiting the width of the cut, the southbound passing track was moved to a location beyond the westerly limits of the project. This left the two main lines and the northbound passing track to be provided for at the lower level. The lowering of the tracks naturally imposed many problems arising out of the differences in elevation between existing freight and passenger facilities and the new track level and the necessity of maintaining connections with industry tracks. Problems of the latter nature were solved in most cases by extending the industry track the distance necessary to bring it down on a ramp grade to the depressed track level. At the junction with the H. P. R. A. & S., the connection between the westerly leg of the wye and the Southern's tracks was abolished, this being permissible because of the presence of another wye in the vicinity, and the easterly leg of this wye was extended about 1,280 ft. east to a new connection with the northbound passing track.

To render the freight-handling facilities more accessible, a new layout, embodying five stub-end tracks, was constructed on the south side of the main tracks in the vicinity of Perry street, with a connection to the extended wye track. This area was formerly the site of a deep ravine, which was filled in with waste material excavated from the cut, about 500,000 cu. yd. of material being disposed of in this manner. The freight house provided at the new location consists partly of the frame portion of the old freight house and partly of a new frame addition of two-story construction, which houses the offices. Other facilities provided at the new location include a transfer platform and an automobile unloading platform.

The brick portion of the existing freight house was allowed to remain in its original location west of Main street and is now used for the handling of express business. This facility is connected with the new track level by a curved ramp, paved with concrete, which is built on a grade of 10 per cent.

### Changes in Passenger Facilities

To adapt the existing passenger station to the new conditions, it was necessary to make such alterations and additions as were required for two-level operation. The station was not moved from its original location and because of its close proximity to the tracks, it was necessary to provide a retaining wall along the front of the building. This wall, which has a maximum height of 26 ft., extends westerly from the Main Street bridge to a point beyond the west end of the station, where it is recessed to provide space for a baggage elevator and a passenger stairway connecting the track and station levels. For the use of patrons of the H. P. R. A. & S., which uses the northbound passing track as a pull-in track, a concrete platform was provided at the track level along the south side of the cut west of the station.

For handling the passenger business of the Southern at the track level a concrete island platform, 754 ft. long,



This View of the Cut, Looking East, Was Taken From the Foot Bridge at the Passenger Station—Main Street Bridge in Foreground

was provided between the two main tracks. This platform is covered with a butterfly-type canopy for a distance of 604 ft. from the east end and at its extreme west end it is connected with the lower end of the ramp to the express building by means of a paved drive extending across the southbound main.

Access to the island platform from the station is provided by a covered foot bridge which spans the northbound main and passing tracks at the upper level near the west end of the station and is connected with the platform level by a stairway. Other changes made at the station site include the provision of a frame canopy, 53 ft. by 58 ft. in plan, at the south end of the station, which covers the area from which the foot bridge and the stairway and elevator to the track level are reached. This concourse area, which extends over the recess in the retaining wall, has a concrete floor and, except for the enclosed elevator shaft, is open on the sides. Balustrades of wrought iron construction are provided along the track side of the concourse and along the top of the retaining wall to the Main Street bridge, on both sides of the foot bridge and at other locations where such protection was required.

### Retaining Walls Required

For much of the length of the project it was possible to construct the cut with standard 1:1 slopes. However, because of limitations imposed by the proximity of various structures and streets in the vicinity of Main and Wrenn streets, where the cut reaches its maximum depth, it was necessary to resort to the construction of retaining walls at points on both sides of the cut in this vicinity. The wall along the front of the passenger station has already been mentioned. In addition, a wall 216 ft. long extends between the Main Street and Wrenn Street bridges on the south side of the cut, while on the north side of the tracks the side of the cut is retained behind walls continuously from a point 95 ft. east of the Main Street bridge to a point 580 ft. west of this structure. All such walls are of the cantilever type on pile foundations and are of varying heights, depending on the space available for slopes.

In preparation for starting work on the project, the existing passenger station was abandoned temporarily





The Grading Operations Were Highly Mechanized

and passenger activities were transferred to a point beyond the westerly limits of the project. To serve as a temporary station, an old frame passenger depot that had been retired years ago was rehabilitated and brought into service. Prior to undertaking the excavating work, a series of soundings, involving the drilling of 48 holes, was made throughout the length of the cut to a point 2 ft. below subgrade.

This investigation revealed that the subsoil consisted of red clay and did not indicate the presence of water in appreciable quantities.

The procedure employed in carrying out the excavation work involved the diversion of all traffic to a temporary single track along the north side of the right-of-way, removal of existing trackage within the limits of the project, and the excavating of a cut of single-track dimensions to final subgrade on the alignment of the new northbound passing track. At one location the temporary track was carried across a ravine on a new concrete and steel trestle which was built as a part of this project and which was later incorporated into one of the industry tracks. When the new northbound passing track had been laid, traffic was diverted over it, the temporary track was removed and the excavation of the cut to its full width was undertaken. Because of the prox-

imity of the passenger station to the open cut, it was necessary to underpin the station, pending the construction of the retaining wall. Grading operations were completely mechanized and, with the work proceeding on a three-shift basis, a maximum of 185,000 cu. yd. of material was moved in one month.

### Wet Conditions Encountered

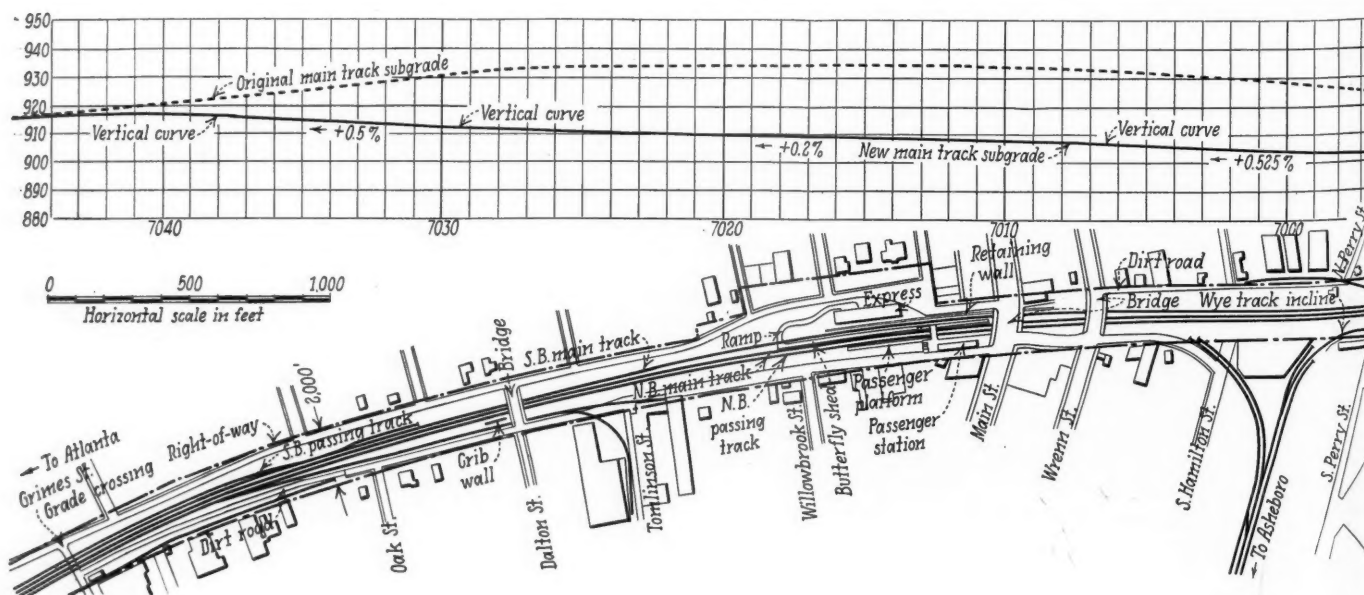
However, the work did not proceed without complications. During the course of the grading operations for the northbound passing track, exceedingly wet conditions were first encountered at the 16-ft. level for a distance of about 2,000 ft. in the vicinity of Main and Wrenn streets, and it soon became apparent that drastic measures would have to be applied for disposing of the ground water. Inasmuch as the borings had indicated a relatively dry condition of the subsoil, the discovery of ground water in such large quantities was unexpected. Its presence was explained by the fact that the water was confined in crevices, where it was not located by the borings.

To dispose of the ground water, it was decided to install a complete subsurface drainage system in the affected portion of the cut. This system comprises mains along both sides of the cut, each with its separate system of laterals. Because of the manner in which the excavation for the cut was carried out, that portion of the system serving the south side of the cut was installed first, while installation of the system serving the north portion of the cut had to await completion of the grading.

Also, because of slope conditions, some of the laterals serving the mains along the south side of the cut had to be installed in two sections.

### Details of Drainage System

The drainage system was installed in the cut for a distance of approximately 1,700 ft., although the distance between the outfall drains at the extreme ends of the system is about 2,400 ft. For all practical purposes the drainage system is divided into two sections with Wrenn street as the dividing line but the summit in the flow lines of the main drains was established in the vicinity of Main street, with the flow being in opposite directions from this vicinity. Hence it was necessary to



provide a connection between the two sections at Wrenn street.

The southerly longitudinal drain in that portion of the drainage system west of Wrenn street was placed between the northbound passing and the main tracks, while the northerly drain was located on the south side of the southbound main track where it lies for part of its length under the island platform. Because of the extremely wet conditions that prevailed in the cut, it was not possible to place these drains under the side ditches. In this section of the drainage system, the laterals extend in both directions from each main and are so spaced and are of such length as to serve the varying drainage requirements of this portion of the cut. The laterals range from 5 to 38 ft. in length, one pipe of the latter length being installed under the elevator recess in the retaining wall, while the spacing ranges from 17 ft. to 54 ft.

In that portion of the drainage system east of Wrenn street, the main drain along the southerly side of the cut, for reasons explained later, was installed directly under the center line of the northbound passing track, with laterals extending in both directions, those to the south being 10 ft. long and reaching to the side ditch and those to the north being generally 17 ft. long and extending under the northbound main to the approximate center line of the cut. The longitudinal main along the northerly side of the cut in this vicinity was placed under the side ditch, with laterals reaching under the southbound main to the center of the cut, these laterals ranging from 14 ft. to 26 ft. in length. As noted previously, that portion of the drainage system between Wrenn street and Main street drains to the east, and to provide an outlet for water originating here a connection between the southerly mains of the two principal sections of the drainage system was provided at Wrenn street.

Both the mains and the laterals in the sub-surface drainage system consist of 16-gage, 8-in. perforated asbestos-bonded Armco pipe, paved and coated. The mains were placed in ditches having a uniform width of 2 ft., while the ditches for the laterals tapered from a width of 2 ft. at the top to 1 ft. 6 in. at the bottom. Both the mains and the laterals were laid with the perforated side down on compacted beds of broken stone placed in the bottoms of the trenches. To prevent fine material from forming a compact mass around the pipes, each section was wrapped in a thin layer of wheat straw as it was laid. The ditches carrying both the main

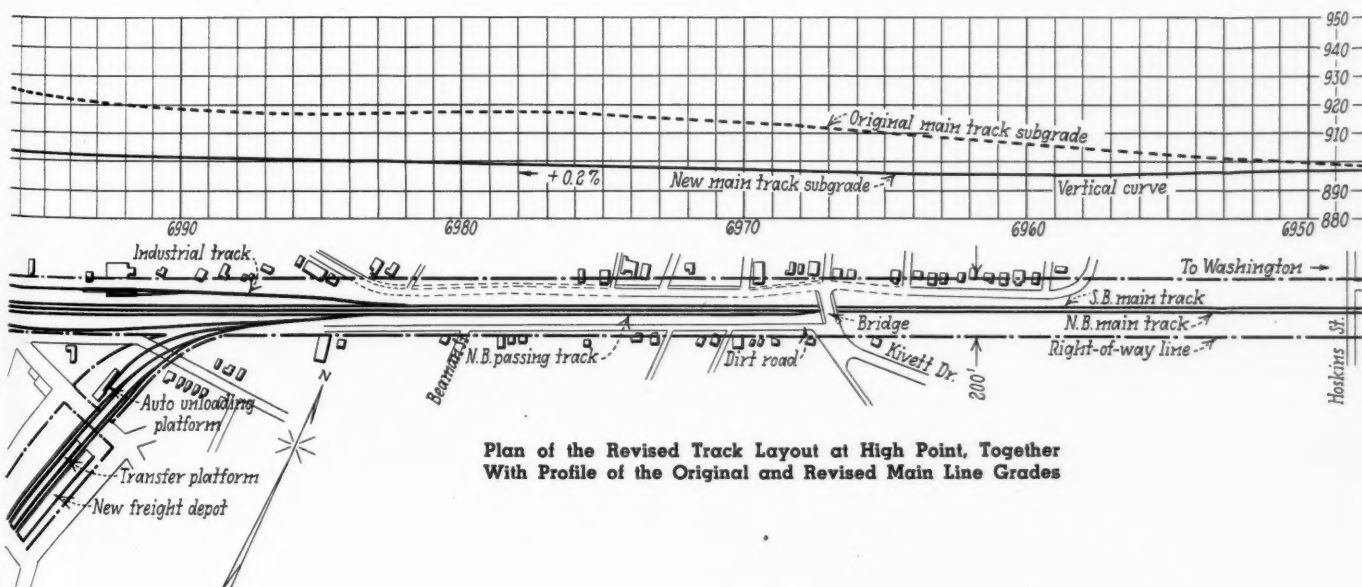


Looking East in the Cut From the Dalton Street Bridge

drains and the laterals were backfilled with broken stone to a depth of 4 ft., after which they were sealed against the entrance of surface water by the application of a 6-in. layer of disintegrated granite, which was obtained locally, and the remainder of the ditch backfilled with clay. All laterals were installed on a grade of 4 per cent and are closed at their outer ends with cast iron plates.

### Special Methods Required

When the wet conditions were first encountered east of Main street, an attempt was made to drain the cut, which was then of sufficient width to accommodate only one track, by means of a deep ditch along the center line. Hence when the drainage system was installed, the main drain in this vicinity was placed in the existing trench, which is on the center line of the northbound track. Because this ditch was considerably wider than was required for the subdrainage system, it was necessary to resort to special measures for confining the back-filling material within the desired limits. These measures included the provision of two parallel lines of standard chicken wire in the trench to serve as forms



Plan of the Revised Track Layout at High Point, Together With Profile of the Original and Revised Main Line Grades



for the backfilling material. These lines of fencing were spaced 2 ft. apart and were each supported by a line of 4-in. by 4-in. posts spaced 8 ft. apart.

The excess width of the excavation outside of the chicken wire was back-filled with earth concurrently with the placing of the broken stone between the lines of fencing.

In that portion of the drainage system that drains to the east, the drainage mains were installed on a grade approximately equivalent to that of the track subgrade (0.5 per cent) and hence the depth of the mains below the subgrade is fairly uniform, being about 6 ft. or slightly more. At this end of the drainage system, each main discharges into a 12-in. reinforced concrete outfall drain 250 ft. long, which in turn empties into a box culvert extending transversely under the tracks at a depth of about 7 ft. below subgrade.

This culvert also receives sub-surface water from a drain 500 ft. long that was installed without laterals to the east of it.

In that portion of the system that drains to the west, the main drains discharge into an outfall drain consisting of a 36-in. reinforced concrete pipe which was installed at right angles to the tracks. In this part of the system the flow lines of the main drains are on a descending grade of 0.3 per cent whereas the track subgrade ascends on a grade of 0.2 per cent so that at the point where they discharge into the outfall drain the deepest of the two (the northerly main) is 11 ft. below the subgrade. To secure an outlet, it was necessary to extend the outfall drain 800 ft. to the south. Because of its great depth (as much as 32 ft.) below the natural ground level, it was found more economical to install part of this pipe by tunneling rather than by open excavation.

Where sufficient space is available, access to the main pipes in the drainage system is obtained by means of man-holes of 30-in. Armco pipe, which were installed at intervals of about 300 ft. At other locations, particularly where the one main was installed under the northbound passing track, riser pipes, connecting with the laterals and consisting of 8-in. Armco pipe, were placed at about the same spacing as the man-holes. Both the riser pipes and the man-holes are provided with perforated cast-iron covers.

So effectively did the sub-surface drainage system dispose of the ground water that, following its installation in the single track cut that constituted the first increment of the grading, it was possible to complete this section of the cut and lay the northbound passing track without further difficulty. In fact, it is reported that the installation of the sub-drainage system resulted in the creation of ideal subgrade conditions throughout the cut. Wet conditions were also encountered in the vicinity of the Kivett Drive bridge but here the situation was corrected by dumping cinders in the affected



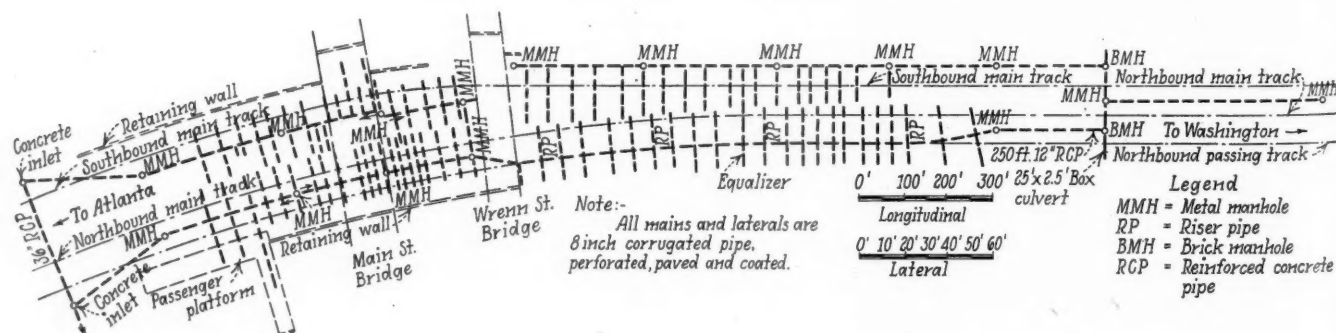
View of a Slide, Showing the Character of the Cléavage Planes That Caused Trouble of This Nature

area, a total of seven car loads of cinders being placed within a distance of 200 ft.

### Slides Also Are Problem

Considerable difficulty was also experienced with slides during the grading work. This trouble was attributed to the presence of fissures extending roughly parallel with the cut in wavy lines and having a declination of about 20 deg. toward the north from the surface downward. These fissures appeared to be about  $\frac{1}{8}$  in. in thickness and to be filled with a dark-colored substance similar to graphite. Owing to their presence, the slopes of the cut had a tendency to slide wherever the plane of the slope cut through a fissure at two adjacent points.

Slides of an extensive character were confined to three locations, although movements of a minor nature were relatively numerous. One of the larger slides occurred at the site of the Wrenn Street bridge, while another took place immediately west of the Dalton Street bridge, both of these being on the south side of the cut. For controlling the latter slide, a crib wall, 96 ft. long, was



Layout Plan of the Subsurface Drainage System



constructed of reinforced concrete units. The third slide of large proportions took place on the north slope a short distance east of Wrenn street. Stabilizing measures applied at the latter location included the cutting back of the slope to an inclination of  $1\frac{1}{2}:1$  and the removal of 6 ft. of the overburden at the top of the slope.

### The Original Rails and Most of Ties Used

In restoring the tracks through the cut, the original rails and about 80 per cent of the ties were used. The main tracks were ballasted with crushed stone, but the sub-ballast for the main tracks and all ballast for the passing tracks and sidings consists of disintegrated granite obtained from a local deposit on city-owned property.

During the grading work and pending completion of the highway bridges, street traffic was handled across the excavation on a temporary timber bridge on pile bents at Main street. At each of the other bridge locations, construction of the southerly abutment, together with a portion of the deck and an intermediate pier at each location, was carried out after the completion of the cut for the northbound passing track, but construction work on the northerly portions of these structures had to await further progress in the grading operations. At the Main Street crossing the westerly half of the bridge was constructed first, after which street traffic was routed over the completed portion and the temporary bridge was removed to permit completion of the permanent structure.

The street bridges are all three-span structures designed to span four tracks, and consist of I-beam decks encased in concrete and carried on concrete abutments and piers.

The entire track depression project at High Point was designed under the supervision of Frank T. Miller, consulting engineer of Greensboro, N. C., in collaboration with the engineering department of the Southern. Detailed plans for the bridges and retaining walls were prepared by the engineering department of the North Carolina State Highway and Public Works Commission, which also exercised supervision over the building of these structures. All other construction work was carried out under the supervision of Mr. Miller. J. G. Todd was the resident engineer on the job for the railway, while W. J. Stribling represented the consulting engineer. G. S. Ward was resident engineer inspector for the United States Emergency Administration of Public Works, from which source a grant was received to cover a portion of the cost. W. S. Sizer served as resident engineer for the North Carolina State Highway and Public Works commission. Blythe Brothers Company, Charlotte, N. C., was the general contractor on all railroad work, while A. H. Guion & Co., Charlotte, had the general contract for the construction of the street bridges.

"CARRY ON" is the title of a special employees' publication of the London Midland & Scottish (Great Britain) which is to continue indefinitely for the duration of the war. It has replaced previous staff publications comprising "LMS Magazine," "Quota News" and "On Time," publications for the official family, members of the traffic department and employees of the operating department, respectively, all of which have been discontinued. "Carry On" contains items dealing particularly with the railroad's relation to the pursuit of the European war and is aimed particularly to preserve and instill a sense of participation in employees. Copies of this publication may not be sent abroad.

## Britain's 1938 Record

THE railways of Great Britain, on all services, including ancillary operations (except railroad services under the control of the London Passenger Transport Board) earned a net revenue of £29,757,544 (approximately \$145,811,966 at 1938 rate of exchange) in 1938, as compared with £38,684,383 in 1937, according to a report issued by the Ministry of Transport under the title "Railway Returns." At the same time the operating ratio of the British roads increased from 79 per cent in 1937 to 84 per cent in 1938.

The British roads handled 18,673,192,226 ton-miles (short tons for comparison) of revenue and non-revenue freight during 1938, which averages out about 415 ton-miles per capita. Class I roads in the United States reported 316,909,802,000 ton-miles for the same year, or an average of more than 2,450 per capita.

Excluding those services under the jurisdiction of the London Passenger Transport Board, the British roads in 1938 carried a total of 604,466,133 passengers (exclusive of commuters and holders of workmen's tickets), a decrease of 8 per cent as compared with 1937, and hauled a total of 264,429,456 long tons of freight, as compared with 297,151,524 long tons in 1937. In addition, they carried daily 645,154 persons holding commutation tickets, a decrease of .57 per cent under the previous year, and 244,385,193 passengers holding single trip workmen's tickets, a decrease of 1.05 per cent as compared with the previous year. An additional 484,000,000 passenger trips originating in the London area brought the total of passenger single trips in 1938 to approximately 1,720,000,000, compared with 1,819,000,000 in 1937. Total revenue from passenger traffic (exclusive of mail and express) reached £58,622,769, an increase of .06 per cent over 1937. Freight revenue totaled £87,818,194, a decrease of 4 per cent under the previous year's yield. Total revenue from railway operation amounted to £164,726,001, as compared with £171,391,608 in 1937, while railway operating expenses totaled £137,666,223, as compared with £136,135,587 in the previous year.

The amount appropriated for the payment of interest and dividends during the year was £29,946,795 (\$146,739,295), as compared with £38,245,178 in 1937. These figures represent 2.68 per cent and 3.42 per cent, respectively, of total revenues.

The total number of containers for merchandise traffic owned by the roads at the close of 1938 was 15,511 units, as compared with 13,845 at the close of 1937.

An increase of 5 per cent in both freight and passenger rates, subject to certain exemptions in the case of freight charges of less than 20 cents per ton, in the case of workmen's tickets fares of less than 10 cents was made effective October 1, 1937. The fact that these increases applied throughout the year 1938 but only to the last three months of 1937 probably explains the increase in passenger revenues as contrasted with the decrease in passenger traffic. In the case of freight, however, the increase in rates was not sufficient to overcome the decline in traffic. No further changes in standard rates were allowed by the Railway Rates Tribunal during the year.

Revenue statistics quoted above represent amounts before deduction of rebates on the rates charged for certain communities in conformity with the Railway Rates Rebate Act of 1936. On November 1, 1938, the Railway Rates Tribunal reviewed the results of the rebate scheme and made certain adjustments in the scale of rebates to be allowed, effective December 1, 1938.

## Railroads Still Losing Ground to Competitors

WASHINGTON, D. C.

**R**AILROADS in 1938 failed by 233,413,000 tons to maintain their 1928 position as carriers of freight originating from production in this country, according to the latest study of "Fluctuations in Railway Freight Traffic Compared with Production," which has just been issued by the Interstate Commerce Commission's Bureau of Statistics. The study, though there are some revisions, is similar in purpose and method to a previous one which was reviewed in the *Railway Age* of February 11, page 262.

### Estimates Revenue Loss at More Than 635 Million

The Bureau calculates that if the haul on the traffic lost averaged 100 miles, the 1938 revenue loss would be \$635,205,000—an estimate which "takes no account of the revenue lost by rate reductions forced by competition or the revenue gained by rate increases." Also, a tabulation of revenues from milk traffic shows that the total fell from \$36,670,061 in 1928 to \$11,150,788 in 1938, a drop of almost 70 per cent; while the poundage of milk produced on farms was increasing 11.7 per cent.

The foregoing figures cover all railroads, the Class I carriers having failed last year to maintain their 1928 positions by 213,386,000 tons. The study, like the previous one, computes indices based on 1928 as 100 of production, potential railway tonnage and actual railway tonnage. The application of the production index for each year to the 1928 railway tonnage gives for each year what is designated in the tables as "potential railway traffic" (called "computed traffic" in the previous study), i. e., the amount the railroads would have carried each year if they had been maintaining their 1928 position. Against this "potential" tonnage, the actual traffic is set up, and the differences between the two measure the railroad losses.

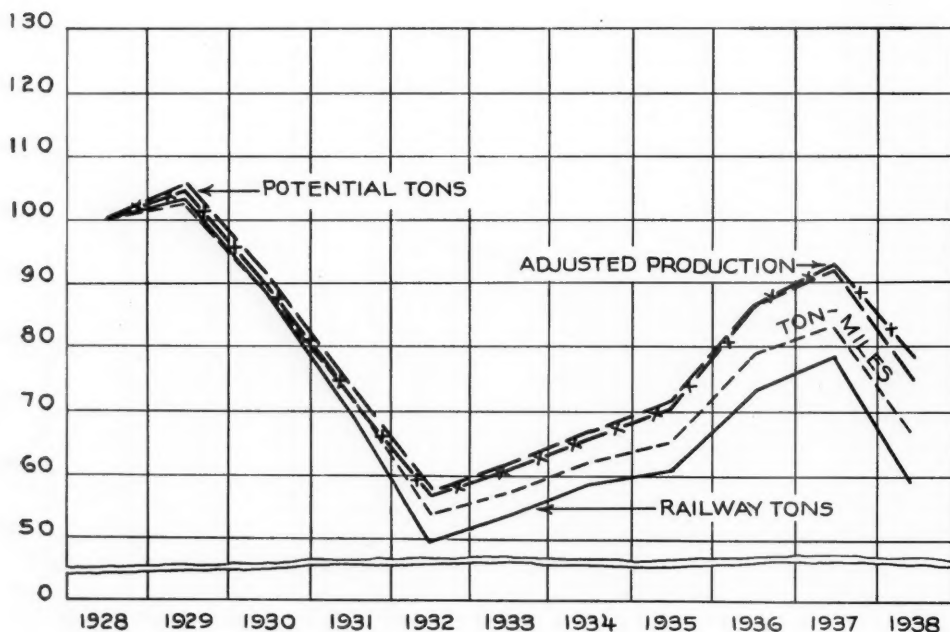
As noted above the composite figures include all railroads while the data by classes of commodities covers only Class I roads.

The former data show that the 1938 index of railroad tonnage was 59.6, as compared with the adjusted production index number of 78.6; the railroads carried 50 per cent of the 1928 production, but only 37.9 per cent of 1938's. Meanwhile, the 1938 railway tonnage index number for Class I roads was 59.6; those roads carried 46.8 per cent of the 1928 production and 35.5 per cent of 1938's.

With respect to products of agriculture, the 1938 production index number was 100.4, the index of Class I railway tonnage 78.3. In 1928 the Class I railways carried 39 per cent of the agricultural production as compared with 30.4 per cent in 1938. The 1938 production index for animals and products was 101.9, the index of railroad tonnage 57. Between 1928 and 1938 the proportion of this production hauled by rail dropped from 72.8 per cent to 40.7 per cent.

The 1938 production of products of mines was 74.5 per cent of that in 1928, while the 1938 railway tonnage of such products was 58.4 per cent of that handled in the base year. In other words the carriers got a haul on 51.2 per cent of the 1928 mineral output, but this dropped to 40.2 per cent for 1938. The 1938 production index for products of forests was 63.1, the index of railway tonnage 44.8; railways in 1938 hauled 21.9 per cent of the production as compared with 30.8 per cent in the base year.

As against a production index of 82.6, the 1938 index of railway tonnage in the manufactures and miscellaneous group was 62.4. The railroads handled only 32.6 per cent of the production in 1938 as compared with 43.2 per cent in 1928. Since no volume of production could be assigned to l. c. l. traffic, that group was compared with the trend in aggregate production of the detailed classes to which it might have been distributed had the quantities been known. On this basis the 1938 production index becomes 78.6 as compared with a railroad tonnage index of 39. While suggesting that the "principal" cause of this "severe decline" probably lies in the competition of trucks, the Bureau goes on to point out that diversion into carload lots by forwarders and competition from express and parcel post services are factors. In the latter connections, the Bureau adds, the tonnage remains on the rails under different classifications.



Tons of Adjusted Production, Potential Tons, Railway Tons, and Ton-Miles, Class I Steam Railways, 1928-1938 (Relative Figures 1928 = 100)



# South Wins Freight Rate Case

But victory on principle involved in controversy  
brings no specific relief with respect  
to many of the assailed charges

WASHINGTON, D. C.

**P**ROMULGATING a five-to-four decision under the fire of Chairman Eastman's sharply-worded dissent which called the controversy "a political issue" that "has in effect been decided in advance and without regard to the record, by many men in public life of high and low degree," the Interstate Commerce Commission has passed upon the so-called Southern governors' rate complaint, giving the South a victory in principle by ordering reductions of South-North interterritorial rates on a limited number of commodities to the intraterritorial basis within the North. The case, docketed as No. 27746, *State of Alabama, et al. v. New York Central Railroad Company, et al.*, was decided on November 22, but the decision was not made public until November 30.

The South's victory in principle flows from the majority's finding that the commodities on which northbound interterritorial adjustments are ordered "will not move freely at rates higher, distance considered, than those applicable within the North." On the other hand, no relief was granted in connection with the assailed rates on more than half of the 17 commodity groups named in the complaint. The commodity groups on which adjustments were ordered to become effective March 1, 1940, are as follows: Stoves; stone; cast iron pipe fittings in less than carloads, iron body valves and fire hydrants; brass pipe fittings, cocks and valves; soapstone and talc; enameled iron or steel plumbers' goods in carloads; and papeteries in less than carloads.

## Relatively Small Amount of Traffic Involved

Although the Southern governors have enjoyed wide publicity in connection with their complaint, as have Southern and Western congressmen sponsoring various interterritorial freight-rate bills, the traffic and revenue involved were relatively small, and the interest of Southern shippers generally has been something less than enthusiastic. "Actually," as Chairman Eastman's dissenting opinion put it, "the complaint . . . brings in issue the interterritorial rates on a very limited number (which might also be called 'surprisingly small') of southern mineral and manufactured products. Conspicuous by omission are the major products manufactured, mined, or grown in the South which account for the greater part of its commerce with the North. Moreover, with respect to some of the products included, the interest manifested in the proceeding by the producers and shippers within the South was scant."

Commissioner Porter joined in Chairman Eastman's dissenting expression, while Commissioner Miller filed another dissent asserting that the complaint should have been dismissed for lack of proof. Commissioner Mahaffie subscribed to Mr. Miller's views; while Commissioners Alldredge and Patterson did not participate. Thus the majority report, written by Commissioner Lee, represents also the views of Commissioners Aitchison, Splawn, Caskie and Rogers. Commissioner Lee was co-signer with Examiner Corcoran of the proposed re-

port which was reviewed in the *Railway Age* of March 4, page 389.

Some of the readjustments required by the majority report are based on findings that the rates involved are both unreasonable and unduly prejudicial, although a few are condemned on the finding of undue prejudice only. The decision, which occupies 79 mimeographed sheets, follows generally the lines of the proposed report, proceeding through discussions of the economic resources of the South and the evolution of the present rate situation to a survey of rates and conditions surrounding the movement of each of the commodities involved. While all railroads over which the assailed rates apply were respondents, the report points out that the positions of the Southern and the Northern roads were "distinctly different." The former are "generally in sympathy with the aims and objectives of complainants," while the Northern lines, Northern states, commissions, commercial organizations and shippers who intervened "are a unit in opposing the complaint in all respects."

## Southern Roads Dispute Cost Evidence

The discussion of the cost of transporting freight in the South and in the North reveals, however, that the Southern lines did not go along with the complainants' contention that costs are no higher in the South than in the North. In fact, the majority report says, they "vigorously urge that cost of operation and other traffic and transportation conditions in the South are less favorable than in the North, and are such as to warrant a higher level of rates therein than in the North;" or, as Chairman Eastman puts it, the Southern lines "were quick to take alarm at the effort to justify the relief sought on the ground that their transportation costs are as low or lower than those of the Northern roads, realizing the serious implications of such a finding as the majority now makes." The latter is a reference to the majority's finding that "the cost of transporting the articles named in the complaint from producing points in the South into the North, compared with that of transporting like articles within the North, does not justify the maintenance thereon of higher levels of rates than are applicable on like articles within the North."

That finding comes within the commission's "Discussion and Conclusions" which had been launched with this observation: "The desirability of rate structures providing reasonably uniform levels of rates from adjacent producing sections of the country to common markets is not open to serious question. When the important products of one producing section are subjected to a higher level of rates to such markets than are like products of adjacent competing producing sections less distant to such markets, it generally cannot develop unless, and then only to the extent that, the differences in transportation charges can be offset by lower production costs or absorbed by a reduction in profits. And even though differences in transportation charges can be thus offset

or absorbed, this in itself tends to retard its growth and prosperity. In these circumstances, it is apparent that the relation of the rates may be of greater importance than their intrinsic level or measure."

Because "this is largely the situation here presented," the parties emphasized, and "we fully concur in," the view that "the fixation of transportation charges for the purpose of equalizing opportunities is not the purpose of the act which we administer." Nevertheless the majority suggests that it may be stated with equal emphasis that "a fundamental purpose of that act is to insure that differences in transportation charges from competing producing points are based solely on differences and circumstances and conditions surrounding the transportation of the competitive products." It is from the latter viewpoint "that we approach the issues here presented."

#### **Not I. C. C. Province to Equalize Production Costs**

Continuing, the report asserts that the complainants "recognize and do not seek to overcome any natural disadvantage of more distant location from important markets in the North;" they asked for the same mile-for-mile level of rates and not the same rates. On this general question of whether differences in costs of production such as wages, taxes, etc., of competing producers might properly be considered by the commission in determining the lawfulness of transportation charges, the majority next observes: "Of course, in fixing rates we may and should consider along with other evidence, conditions in a particular industry, with a view to promoting freedom of movement of the products of that industry . . . But it is not our province so to prescribe rates as to enable shippers of any section to neutralize, through differences in transportation charges, higher production costs or other economic or natural disadvantages."

Other discussions leading up to the findings dispose of such questions as the weight to be given previous commission findings in the Southern class-rate investigation and other proceedings; the bearing on the proceeding of divisions between Northern and Southern roads of inter-territorial rates; and the above-mentioned finding with respect to operating costs. Also, there is the observation similar to one found in the proposed report to the effect that if the Southern roads are willing to move the traffic involved at rates based on the North's intraterritorial level, "it is difficult to conceive of any just reason why Northern carriers should not be required to join them."

#### **Eastman's Dissent**

Chairman Eastman's dissent occupies 13½ mimeographed sheets. As noted above, he asserts that "the commission is called upon to decide this case, on the record, after it has in effect been decided, in advance and without regard to the record, by men in public life, of high and low degree, who have freely proclaimed their views on what they conceive to be the basic issues."

"Their thesis," the chairman goes on, "has been that the section of our country generally known as the South is our 'Economic Problem No. 1,' because, among other things, it is low in industrial development, and that a major reason for this condition has been and is an unfair adjustment of freight rates which has favored the producers of the North and burdened those of the South. It has become a political issue. While, however, the South gave birth to the issue, public representatives of the West now cry out against like supposed oppression, and public representatives of the North or East, as it is

variously called, have risen in defense of their section."

Under such conditions, when "it is not easy to decide the case without being influenced by emotional reactions," Mr. Eastman warns that it is "all the more important" for the commission, having "an equal duty with respect to every part of the country," to reach its conclusions "with cold impartiality." Nothing, he adds, will speed the commission's ruin more quickly than "the disease of sectionalism." Next comes the chairman's above-quoted reference to the relatively small amount of traffic involved, following upon his telling of how "the idea has been broadcast that the future industrial prosperity of the South may hinge upon the decision in this case." He finds "some reflection of this thought" in the decision's discussion of Southern resources and economic conditions.

From these more general observations the chairman proceeds to more specific criticisms of various pieces of reasoning in the majority report. The evidence with respect to the industrial development of the South, he says, "is given considerable space and prominence," only to be minimized by the conclusion that "the fixation of transportation charges for the purpose of equalizing opportunities is not the purpose of the act which we administer." With respect to costs, Mr. Eastman goes on, the report concedes that the methods used are open to criticism, "but it goes on to say that the objectionable features 'probably' do not affect the relative results." Furthermore, he asks: "What elements have been given controlling weight in the decision?" The "Discussion and Conclusions," he complains, "contain nothing which would serve as a direct answer to this query and one is forced to spell it out by assembling statements from various parts of the report. Of principal significance on this point is the different treatment accorded the commodities dealt with. . . . The reasons for differentiating between the two groups of commodities are not definitely stated and can only be inferred."

#### **Finds Report Obscure**

For example, Mr. Eastman finds it impossible to tell from the report why the rates on enameled plumbers' goods and papeteries are found unduly prejudicial but not unreasonable; with respect to boots and shoes on which no relief was granted, he says that "the inference seems to be that whether freight rates are reasonable and fairly related is an academic question so far as shoes are concerned." As for excelsior, "the discussion is the same with a few unimportant changes, as in the proposed report, where a finding that the rates on this commodity are unduly prejudicial was recommended. Now it is found that they are not unlawful. The proposed conclusion was, and the present conclusion is, unexplained."

"Summing up the report of the majority," the chairman says, "it appears that 'the cost of transporting the articles named in the complaint from producing points in the South into the North, compared with that of transporting like articles within the North, does not justify the maintenance thereon of higher levels of rates than are applicable on like articles within the North.' Nevertheless a higher level can be tolerated and it is not necessary to inquire very closely into the reasonableness of the rates, if there is evidence that the Southern manufacturer, by reason of national advertising, or patent control, or other like conditions, appears to be doing very well in the competitive race, or if he neglected the opportunity to give of record a vivid account of his handicaps in meeting northern competition. What is termed 'freedom of movement' appears in the last analysis to be the controlling test."

(Continued on page 894)



# Canada's Railways Are Ready for War\*

Facilities which are used lightly in peace prove highly valuable in time of war—Rail carriers are organized to provide smoothly efficient service—In this war of resources, railways may prove to be the deciding factor

By S. W. Fairweather

Chief of Research and Development, C. N. R.



S. W. Fairweather

**A**LTHOUGH I would be happier in telling of the economic usefulness of our railways in developing our country and furthering the cause of peace by facilitating the interchange of goods and services, nevertheless in speaking of the railways' war service I can bring the comforting knowledge that Canada's railways are well able to meet the stress of war. It is cold comfort to our enemies to know, as they must know, that the railways of Canada are well laid out, are efficiently staffed and adequately equipped. The railways will help to make the war effort of Canada effective, both by the movement of troops and military supplies and by supplying the transportation needs of what has been spoken of as the "industrial front."

The art of modern warfare, in addition to its military and naval aspects, consists of the industrial organization on a vast scale of the natural resources of the soil, the forest, the mine and of the sea, all of which must be developed to feed nations in arms and to supply the material needs of mechanized warfare. Modern warfare is waged on such a scale that supplies must be thought of on a continental scale. We read, for instance, that Britain has purchased the entire wool crop of Australia and Canada's exportable surplus of copper, lead and zinc.

The military people have a phrase called the "lines of communication." As commonly used, it has a rather restricted meaning, but in a broad sense, the transportation facilities, which bring the raw materials to the factories and carry the products to the theatre of war, constitute also on the industrial front our lines of communication. Examining the war in the broad sweep of events, it may well be that the decisive factor in favor of the Allies will be their superior lines of communication to sources of food, munitions and supplies.

## Canada as the Allies' Supply Base

The railways of Canada form an important, if not a vital link, in the lines of communication of the Allies, and I can assure you that the Canadian railways realize the responsibility which is theirs and that they will not fail in the test.

Canada is a splendid industrial base for the Allies. Here is a half continent rich beyond measure in natural

resources of the soil, the forest, the mine and the sea. Here is the nearest source of large supply for food and war materials, some of them, such as nickel, vital for war purposes. Probably the only other continental area in the world, which might be compared with Canada in natural resources, is Russia. The war may be determined on the industrial front by the comparative efficiency with which the natural resources of these two vast areas can be used. If such should come to pass, the railways of this country, which were brought into being in peace time for the peaceful development of our natural resources, will become sanctified to the sterner, though equally noble purpose, of defending our liberty. In that event, the wisdom and foresight of those who planned and constructed the nation's railways will be doubly justified.

There are those who have deplored Canada's extensive development of railways. The Dominion has been pointed out as having the largest railway mileage per capita in the world. That was considered by some to be an unenviable position. Let us now be thankful for our railway development, because by means of it the whole of the vast natural resources of Canada can be thrown into the war with a minimum of effort. The resources of our forests can be mobilized by the railways which traverse them, and modern warfare hinges on nitro-cellulose. The wheat fields of Western Canada are interlaced with railway lines, so that in the three Prairie Provinces there are 140 millions of acres of land lying within ten miles of a railway. The copper, nickel, zinc and lead mines which are tapped by Canada's railways are capable of great expansion under the stimulus of war needs. The gold mines of the country are likewise capable of supplying the sinews of war, and we must not forget the industries in town and city which are busily engaged in processing the raw materials into food, clothing and munitions.

## Lines of Questioned Value in Peace

### Times are Vital in War

I want to emphasize the point that had pioneer lines of railway, such as the Pacific Great Eastern and the Canadian National line from Red Pass Junction to Prince Rupert, not been constructed, the natural resources in these localities would be as useless to the Allies as if they were buried beneath the ice-cap of the

\* Abstracted from an address delivered before the Vancouver Board of Trade, November 24.

Antarctic Continent. How else than by a railway line can the resources of the Fraser Valley be made available to the needs of heavy industry? How else than by a railway line can the resources of the Skeena Valley be made available? Without railway connections how could the port of Prince Rupert be made fully effective as a base for naval operations, shipbuilding, shipping and as a base of operations for fishing fleets? I have used these two lines as examples because they are known to you, but the same can be said of lines of railway in every part of the country, lines which, from a narrow point of view, fail to earn enough revenue to pay for their operation, but which are of great value to the nation, even in peace time, and which become of even greater importance in war time.

In the concerted and co-ordinated activities of a nation engaged in a vast war, there can be no thought of the pre-eminence of any single factor in our industrial front—all are vitally important and all are inter-dependent. But it is not enough to have natural resources; it is not even enough to have the will to make them available for war purposes; it is not even enough to have available industrial skill and capital. These things are vital, but to render them effective there must be adequate and efficient transportation for the carriage of men and goods great distances to our ports. In Canada, that means railways transportation, for it is the only method capable of performing that task.

#### Canada vs. Russia as a Source of Supplies

I have spoken of the relative importance of Russia and Canada as sources of supply for food and materials. I do not propose to pursue the comparison of the industrial efforts which these two countries might put forth, but it may be interesting to note that while they are alike in possession of vast natural resources, they are entirely dissimilar in their organization and equipment for production and transportation. You have the totalitarian Russian state against the Canadian democracy. You have Russia with one of the lowest per capita wealth productions in the world compared with Canada, which has one of the highest. You have, too, in Russia a country whose transportation system is inadequate, as compared with Canada, which has the most efficient railways in the world. Above all, you have exemplified in Russia the weakness of bureaucratic management and control, as compared with sound business methods in Canada. I venture to say that, measured in terms of exportable goods, the labor of one man in Canada is as productive as the labor of twenty men in Russia.

What a contrast there is between the Canadian railways in 1939 and the Canadian railways in 1914, a quarter of a century ago when the last Great War began. At that time war found us in the midst of a period of railway expansion, with thousands of miles of railway only half constructed. It found us with the railways which now comprise the Canadian National operated by no less than 19 different independent managements and incapable of rendering any effective transcontinental service. It found us weak in railway equipment, because these companies, for the most part, were hard pressed financially. It found us without any substantial knowledge of co-ordination and co-operation between these many railway corporations, both as regards each other and as regards their common competitor, the Canadian Pacific, which was, in fact, the only integrated railway system in Canada at that time. Despite all these

factors, the war effort of Canadian railways from 1914 to 1918 was a creditable performance.

The traffic which the railways were called upon to handle rose to 50 per cent above pre-war levels and, up to that time, constituted an all time peak of rail transportation, not only as regards actual volume of traffic, but also as regards the rapidity with which the problem developed. A great deal of credit goes to the railway executives and employees of those days for the effective piece of work which they carried on under great difficulties.

#### Lessons of 1914 Not Forgotten

We learned many lessons in those days. For instance, the first co-operative action between two railway systems, involving the abandonment of functionally duplicate lines, was effected when the Canadian Northern and Grand Trunk Pacific lines between Edmonton and Red Pass Junction were co-ordinated and 220 track miles of rails released for use overseas. We organized what is now the Railway Association of Canada as a medium for dealing with problems of joint interest, and we got our first lesson in co-operative negotiations and wage agreements. The lessons we learned then have been useful ever since, so that we go into the present war effort with a fund of experience accumulated from the previous war.

The Railway Association of Canada is nothing more or less than the Canadian Railway War Board, which was organized by the railways of Canada in 1917, to assist in the solution of their mutual problems. It did so well that the organization was continued during peace time, and it has served a useful function ever since. When the present war began, we had an organization for common railway action on matters of mutual interest already functioning and it was not necessary, as in the previous war, to wait three years before such a simple idea was given practical effect.

During the last war, one after another of the smaller and weaker railways found it impossible to carry on, and, primarily as a war measure, they were successively taken over by the Dominion government. The process started with a number of small branch line railways in the Maritime Provinces; then, on the refusal of the Grand Trunk to operate the National Transcontinental, the absorption of that line between Winnipeg and Moncton followed. This, in turn, was followed by the absorption of the Canadian Northern. While the Grand Trunk Pacific and the Grand Trunk were not actually taken over until shortly after the war, it can properly be said that the Canadian National, as a co-ordinated railway, had its genesis as a war measure in the last Great War.

There can be no comparison between the capacity of the disjointed members of the Canadian National, as they existed in the last Great War, and the capacity of the Canadian National, as it stands today. Throughout the years which followed the acquisition, the System has been co-ordinated into a really fine railway system. Just how fine, is not realized by the average person, because of the manner in which the operations have been confused with the financial debacle, which led to their acquisition, and by the lack of traffic in the great depression. Under war time conditions, however, the value of the Canadian National low grade main line, extending from Vancouver and Prince Rupert clear through to the Head of the Great Lakes and to the ports of Montreal, Quebec, Halifax and St. John, its double track railway extending through the heart of industrial Ontario and its direct connections to the industrial cen-



ters of the United States, will undoubtedly be demonstrated. It serves with its own main lines every large seaport in Canada and every important traffic gateway with our great neighbor to the south. Its lines of railway ramify throughout the agricultural section of our country; they traverse our vast forest belt; they tap the rich mineral resources of the Laurentian shield, none of which was available in the last Great War. The system has busy and efficient terminals in practically every industrial center of the country and with the ramification of lines it can supply the requirements of industry for raw materials and speed the products for export to whatever port is chosen.

I can speak with some claim to knowledge of the Canadian National because I have been associated with the co-ordination of its constituent members practically from its inception. At the present time, apart from the completion of the Montreal Terminal project, which will co-ordinate the disjointed freight and passenger facilities in Montreal, it stands today, from the physical standpoint, a well-knit, well-maintained and well-staffed railway system and one on which the country can rely in times of emergency. As regards the Canadian Pacific, the other great transcontinental system, I cannot speak with intimate knowledge. I can say, however, that it was a well co-ordinated and efficient railway system in 1914, and that it has improved with the progress in the art of transport, which has taken place since that date. In the two transcontinental railway systems, the Canadian National and the Canadian Pacific, Canada has, in fact, railways which are unequalled in the world, and which enable her to boast that her railway costs per ton-mile of railway service are as low as in any other country at all comparable and much lower than in most of them.

#### Operating Performance 1914 and Today

As proof that the railways of Canada are well organized to meet the emergency of the war, I may mention that in the year 1928 the railways of Canada handled 30 per cent more traffic than was handled in 1917, the peak of the war period, and did it without any sign of congestion or difficulty. What was done in 1928 can be done again, so that even if Canadian railways were called upon to double the freight traffic effort of 1917, I have every confidence that it would be possible to meet even that emergency. Lest I be thought extravagant in making such a statement, I would like to dwell for a minute on some specific comparisons between the Canadian railways' performance of today with those of 1914.

In 1914, the main lines of most Canadian railways were equipped with 80 and 85 pound steel; today the main line standard is from 100 to 130 pounds.

The largest road freight locomotive in 1914 had a tractive effort of 52,000 lb.; the largest freight locomotive of today has a tractive effort of over 90,000 lb. The average freight train of 1914 hauled 350 tons of freight; the average freight train of today hauls 550 tons of freight. If the comparison was available for main line trains, it would be even more striking. In 1914 the average freight train speed was 10 miles per hour; today it is 17 miles per hour. Again, these are the averages of all trains. Today on main line operation, many freight trains operate at passenger train speeds.

In 1914 it required 160 lb. of coal burned in a locomotive to haul one thousand tons per mile; today it is done with 120 lb.

In 1914 it required 11 days for manifest freight to travel from Vancouver to Toronto, today the manifest freight service is 7 days.

In 1914 the average capacity of a freight car was 33 tons; today it is 42 tons. This, taken in conjunction with the much higher speed with which traffic moves, more than offsets the reduction in number of freight cars which has taken place since 1914.

The significance of those figures is that for the same expenditures of labor and materials we manage to get 50 per cent more transportation today than we did in 1914. This means that fewer men have to be set aside from other industrial production to run the railways and to furnish needed supplies for it.

In 1914 Canada had only one transcontinental route; today there are three. Then there was only one line of railway in effective operation connecting British Columbia with the rest of the country; now there are two routes available from Vancouver and another from Prince Rupert.

In 1914 there was only one line of railway through Canadian territory connecting our vital Maritime Province ports with the rest of the country; today we have two, one of them being the National Transcontinental line east of Quebec which affords the shortest route to points east of Moncton and which, because of its easy gradients, has a very large capacity. There is also available, as in the last war, the line of the Canadian Pacific which crosses the State of Maine.

It is because of these things and because of the vast difference between the co-ordinated Canadian National as compared with the disjointed and half-completed nature of its predecessor companies in the last great war that I can speak with such confidence as to the capacity of the railways in facing the present war situation.

In addition to the traffic which can be directly traced to the war effort and, therefore, can properly be called war service, the Canadian railways under war conditions must continue their great public service of supporting the general business activities of the country by supplying cheap and adequate transportation. In an indirect way this service is also a war effort, because Canadian effectiveness in the war must, in the long run, rely upon her economic development.

#### Foresees Tourist Boom, Higher Wages in Trucking

In a transportation sense, I anticipate two interesting developments, one in the passenger and the other in the freight field. In passenger traffic I anticipate that the closing of Europe to the tourist traffic will result in an unprecedented number of our friends from the United States seeking recreation by travel in Canada. The tourist traffic, for a considerable time now, has constituted one of Canada's biggest businesses and is an important factor in her invisible export of goods and services. The Canadian railways, lately supplemented by the Trans Canada Air Lines, and the chain of railway-owned hotels of the two systems, together with the coastal steamship services, are important factors in catering to the tourist business. The Canadian railways are apprised of the opportunity for an expansion of that field, and are making preparations to handle increased tourist business.

Another result of the war will be to demonstrate quite clearly that it is upon the railways that the country must rely for land transportation. Over the past decade we have seen the development of commercial highway trucking, much of it, I am sorry to say, on an unsound basis on account of artificial conditions, partly the result of inadequate taxation, partly from laxity in regulation, partly from the railway rate structure, being based on the value of service rather than the cost of service, and partly on the highly disorganized state of the labor mar-

ket in the trucking field. It is not likely that war time conditions will do very much to alter the first three of these unfair and artificial advantages, by virtue of which motor transport obtains much of its traffic, but I think it is a foregone conclusion that when the industrial tempo of Canada is raised to a point where the labor market is a sellers' instead of a buyers' market, it will no longer be possible for motor truck operators to pay sub-standard wages.

The inevitable result of wage increases will be to raise the cost of motor trucking, and that will mean the return to the railway of a good deal of the middle distance and long distance traffic, which is now moving by truck. Such traffic will go to swell the traffic and revenue of the railways, and in a national sense, the result will be advantageous, because it will conserve energy and economic resources for a more effective war effort, since the railway can perform transportation service much more cheaply than the truck. The average economic cost of transportation by rail is of the order of one cent per ton per mile, whereas by highway and truck it is of the order of five cents per ton per mile.

To sum up, it is my view that a war of any considerable duration will bring an unprecedented volume of traffic to Canadian railways, and that the railways will prove capable of handling it. I know I can speak for every railroad man in the country, regardless of the company which employs him, that both individually and collectively we are determined to let nothing interfere with the effective carrying out of the duty, which we share in common, of supplying the country with rail transportation. That will require a degree of co-operation between the steam railways in Canada, because, although the Canadian National and Canadian Pacific are the largest systems in the country, there are 27 railways other than those controlled by the C. N. R. and C. P. R., comprising 3,258 road miles, which are under provincial government or private company operation. I am happy to state that machinery for that co-operation already exists.

#### Co-ordinated Effort Through Voluntary Action

I draw your attention particularly to the fact that the mediums for co-operation in Canada, whether by voluntary organization or by legislation, are examples of the democratic method. They depend upon the common sense of the parties, a confidence that all are working for the same end and that differences of opinion can be resolved around the council table. This method has the advantage that problems of joint interest can be discussed and settled without becoming confused with problems local to each system. I am satisfied that it is a much better method of bringing knowledge and skill to bear on our transportation war effort than the bureaucratic methods of Russia.

Having regard to all the factors, I am satisfied that Canadian railways can be relied upon to take care of their war time responsibilities. Of course, the railways are an intermediary service, standing between the producers of raw materials and the industries on the one hand, and between the industries and ocean shipping on the other. As such, under ordinary circumstances, railways cannot exercise any preferences. To them the problem is simply one of moving the traffic which offers, and moving it efficiently and expeditiously. Under war time conditions, preferences in industrial production will undoubtedly arise, which will mean that certain plants must be supplied with transportation to the exclusion of others and that traffic must move, in many cases, under emergency conditions, to our seaports. Under such con-

ditions, abetted by the accidental circumstances which must be expected to arise under war time conditions, much valuable railway capacity may be frittered away in cross-hauls and port congestion, unless care is taken to co-ordinate the transportation efforts with industrial efforts and ocean transport. The control of this situation is not really a matter of railway transportation, although allied to it. The railways will be most successful if they confine their activities to the expeditious movement of men and materials on orders from a co-ordinating body.

The situation seems to call for a control authority working in co-operation with the directing organizations for industrial production and ocean shipping, which will issue priority directions to the railways telling them which traffic shall be moved in preference to other and giving notice of the time limits within which traffic of specific categories and destinations may move. The actual movement and all arrangements in connection therewith may then be left to the railways, which can be relied upon to do their job efficiently and expeditiously. In that manner it should be possible to avoid port congestion and ensure the movement of traffic to support key industries.

I know I express the views of all the railway men of Canada when I say that we are one and all eager to contribute our bit to the common effort. We have a common loyalty to Canada's war effort and, keeping that in mind, we can confidently face the test of war.

## South Wins Freight Rate Case

(Continued from page 890)

With "so much for the majority report," Mr. Eastman proceeds to discuss what he regarded as pertinent phases of the proceeding and its evidence. In such discussion he expresses the view that the average cost of service is higher in the South than in the North, and points out that recent decisions in divisions cases have recognized that factor in giving relatively higher divisions to the Southern lines. One good reason for the unwillingness of Northern lines to join in interterritorial rates on the Northern basis, he asserts in another place, "is the fact that the Southern lines have insisted on divisions which would give them the lion's share of the revenue." This assertion came after the chairman had epitomized his views in the following paragraph: "The record before us does not, in my opinion, justify the basic conclusions and findings of the majority. Resolving all doubts in favor of the complainants, I could not, on this record, approve interterritorial rates more favorable to complainants than would be produced if they were adjusted in harmony with the excess in divisions granted to the Southern carriers, as a normal basis, in the recent divisions case."

The Miller dissent is a brief one, which, as noted above, expressed the view that the complainant should have been dismissed for lack of proof. By the majority report, Commissioner Miller complains, previous decisions, rendered "after mature deliberation and upon full and complete records," without a reopening, are overturned and nullified "upon a record which to me appears clearly deficient and which discloses no changed transportation conditions to justify such action."

THE NEW HAVEN RAILROAD EMPLOYEES CREDIT UNION, established only nine months ago, has declared a 5 per cent dividend for its 932 members. The union has grown rapidly since its inauguration January 16 with about \$400 in capital and 20 members. As of October 31 the union reported assets of \$41,087 and a guaranty fund of \$1,199.



# Key Railroaders Probe the Industry For Annual N. Y. Dinner

N. Y. Railroad Club dinner attended by 3,000 railroad and supply men; seven leaders in industry discuss the outlook in special messages

**M**ORE than 3,000 railroad and supply men gathered in the Hotel Commodore, New York, December 7, on the occasion of the 67th annual anniversary dinner of the New York Railroad Club. In honor of the event, seven distinguished representatives of the railroad industry contributed papers which presented varied points of view on accomplishments in the field and the outlook for the future.

## Pelley Affirms Preparedness

That the American railroads are able to keep well in advance of sudden traffic demands is the contention of John J. Pelley, president, Association of American Railroads. They proved this ability in handling successfully the recent unprecedented jump in business, he claims, when their estimate of capacity was far exceeded by actual loadings. Thus, in one week, they handled 45 per cent more traffic than they were handling early in the summer when their prediction of a 25 per cent increase was established. This success is due in great measure, Mr. Pelley declares, to the repair and improvement program which the carriers launched to insure preparedness, "concrete evidence of the railroads' determination to keep well in advance of any and every demand—no matter what it may be."

The A.A.R. chief sounded the warning, however, that the roads are by no means "out of the woods," that their fundamental problems remain the same and will continue to be a plague as long as unequal governmental policies remain. He is encouraged, nevertheless, by the prospect of Congress' remedial legislation which is now in joint conference. While this is not a "cure-all" he believes it to be a "step in the right direction."

Tomorrow's railroading is the subject of a paper contributed by W. M. Jeffers, president, Union Pacific. This "Utopia" of transportation he describes as follows:

"Railroad passenger trains of tomorrow will show additional advancement in air-conditioning, further development in light conditioning, more improvement in riding qualities, greater reduction in train noises, the application of new refinements in appointments and comfort facilities. The passenger train of tomorrow will consume less over-all time between terminals, although it will not necessarily operate at greater speeds between intervening towns. The freight trains of tomorrow will incorporate new discoveries in design and materials, will have better riding qualities resulting in greater protection for commodities being transported, will operate at higher average speeds with heavier pay loads over improved track structures.

"The shipper will have the benefit of simplified tariffs, earlier deliveries, better co-ordination with auxiliary highway transport, a resultant further reduction in inventories necessary to proper conduct of business, further expansion of merchandise car and over-night service to

the end that all towns within organized zones will have such service available.

"The railroad traffic departments of tomorrow will show greater development in aiding the shipper with his problems in packing, loading and routing to the end that service generally will be more satisfactory to the shipper and that further reduction may be made in loss and damage claims."

These developments, the U. P. president declares, will be the result of "thinking from the bottom up rather than from the top down;" that every railroad man will work "in his shirt sleeves" for the elimination of waste and resultant reduction in the cost of mass-transportation. Fundamentals involved in these changes which he cites are reduction of dead time at yards and terminals, sustained speeds, less frequent stops for servicing and bypass operation around points of traffic congestion.

## Changes in Pullman Service

Hale Holden, Jr., vice-president, Pullman Company, enumerated developments in equipment design and services which his organization is currently pushing forward. Recalling that in the past Pullman was the pioneer in introducing such elements as the vestibule, all-steel construction, air-conditioning, lightweight materials and streamlining, he asserts that it is carrying out improvements in the same manner on today's equipment. Of these he mentions the new convertible lay-outs in sleeping car sections; so-called room accommodations; the "roomette," the latest and smallest room unit; the two-tiered "duplex" compartment; the "double bedroom" and the "master room," which innovations, he declares, "are suited to every taste and every purse." In describing these innovations he makes mention also of the modern materials, such as aluminum alloys, corrosion-resistant, low-alloy, high-tensile steel and stainless steel which Pullman employs in the new equipment.

That Pullman service has reached a high degree of excellence is attested by the thousands of letters received from patrons, he writes. The "esprit de corps" which is the basis of this service he attributes in great measure to careful supervision and instruction, illustrated by the "service meetings" held for all classes of employees three times a year.

## What the Roads Have Already Done

The railroads have given a good account of themselves in the last few months. This achievement, writes Walter S. Franklin, vice-president (traffic), Pennsylvania, is chiefly due to the continued progress they have made through the ten years since 1929. Depression years though they were, they "witnessed some of the most important advances in railroad history."

Here are some of those he cites. Freight speeds have

been quickened and practically all trains now operate on schedules; loads per car and per train have increased; over-night delivery of merchandise has been extended to 400 miles and more; storedoor service has been extended. The general level of freight rates has declined from 1.076 cents per ton-mile in 1929 to 0.983 cents in 1938, in spite of increased costs and taxes. In the passenger field, practically all important trains have been air-conditioned; schedules are faster and more convenient; heavier rail, improved trucks, tight-lock couplers and newly-designed seats have increased riding comfort. Not only have new Pullman accommodations brought luxury to long distance travel, but new coach trains now provide the maximum of comfort "for the thrifty-minded." Parallel with this advance, passenger fares are far lower than they were when "this era of improvements" began.

The need for improved employee-training and supervision techniques is the keynote of "Progressive Railroad Operation" presented by R. E. Woodruff, recently-appointed trustee and chief executive officer of the Erie. In looking over the present scene he asserts: "It is probably fair to say that railroad supervisors are not as familiar with the science of plant management and the art of handling human relationships as are those in many other industries." Thus while most railroad offices agree that the training of supervisors and foremen is desirable, "frequently, a man from the ranks is made foreman or supervisor without previous training in the art of foremanship and he never really gets such a training, although it is expected that he will in some way acquire the training and it is hoped by his superiors that someone will pay enough attention to him to keep him out of trouble."

Citing the methods of other industries in informing supervisors through conferences with higher offices, he declares that such training is the "backbone of good public relations."

#### How Are Finances?

"The Railroads' Financial Situation" is analyzed in a paper by Willard F. Place, vice-president (finance), New York Central. Reviewing the past decade, he cites the period 1930 to 1933 as one of low levels for railroad credit, in which government aid was necessary; the next three years as a re-establishment period, at the end of which many companies were able to repay government loans and market new issues; and the recession of 1937 and 1938 as a second decline, effecting a loss of confidence which has not yet been recovered, notwithstanding the recent improvement in business.

Equipment securities, however, are in a class by themselves, according to Mr. Place. In this field railroad credit is not only high but the cost of such financing has never been lower in the history of the roads. "This augurs well for the railroads, as it provides the means to meet the changing conditions and provide the tools required to give the service." On the whole, while many adjustments must yet be made, he believes in the future of the railroads and the restoration of their credit standing.

J. M. Davis, president, Delaware, Lackawanna & Western, and chairman of the Eastern Railroad Presidents Conference World's Fair committee, sets forth significant statistics of the railroad exhibit at the New York exposition recently closed, which, he promises, will be re-opened in the Fair of 1940 to come on a scale "even bigger and better." His review for 1939 may be summarized as follows:

More than 7,000,000 visited the railroad exhibit. A total of 2,137,472 persons paid to see the opera-page-

ant "Railroads on Parade" and the model lay-out "Railroads at Work."

Approximately 2,500,000 viewed the railway supply industry's exhibit "Building the Railroad."

Nearly 4,000,000 visited the 139 units of equipment comprising the track exhibit, the "Coronation Scot" drawing 1,723,222 visitors, the Pullman train, 1,965,391, and the Budd exhibit, 1,325,565.

A total of 955,063 persons posted letters at the railway mail car, using souvenir envelopes supplied by the Eastern carriers and \$21,370 worth of postage stamps.

#### Committees Responsible for the Dinner

George W. Jones, vice-president, Brooklyn-Manhattan Transit Corporation, president of the club, presided at the dinner program, D. W. Pye, president, Tuco Products Corporation, executive secretary and treasurer of the club, handled details of the dinner.

F. H. Hardin was chairman of the general committee in charge of arrangements, assisted by S. F. Pryor, Jr., and Samuel MacClurkan, vice-chairman. Other committeemen were: Advisory—R. L. Gordon, chairman; Edward Laterman and E. A. Workman, vice-chairmen; Attendance—C. C. Hubbell, chairman; J. A. Dillon and A. K. Galloway, vice-chairmen; Dinner—A. N. Dugan, chairman; B. F. Cordts and G. A. Gallinger, vice-chairmen; Entertainment—J. N. Godman, chairman; H. G. Barbee and B. L. Norton, vice-chairmen; Reception—Frank Hedley, chairman; P. E. Pfeifer and R. F. O'Leary, vice-chairmen; Publicity—J. M. Fitzgerald, chairman; George Flatow and I. L. Gordon, vice-chairmen; Seating—C. C. Fletcher, chairman; J. C. Glenn and T. P. O'Brian, vice-chairmen; Out-of-Town—H. W. Wolff, chairman; W. A. Clem and R. W. Oswald, vice-chairmen.

## New Book...

*The Baltimore & Ohio in the Civil War*, by Festus P. Summers. 304 pages. 5½ in. by 8½ in. Bound in cloth. Published by G. P. Putnam's Sons, New York. Price \$3.00.

This is the story of a railroad already great in size and importance by the beginning of the war between the states which found itself in the unenviable position of lying in both Confederate and Federal territory, of having its headquarters in "borderline" Maryland and of being of strategic importance to both of the contending armies and, therefore, an object of attack by both. Its author, an associate professor of history at West Virginia University, has gathered the information for his fascinating story from 120 authentic sources, many of which are correspondence between B. & O. officers and military and governmental powers. However, the author has not permitted this background of detailed scholarship to give his book a "Ph. D. treatise" tone, but has ordered his complicated material in a simple, straight-forward narrative that may be read with ease and pleasure.

The reader will be especially impressed by the importance of the railroad as an aid to the military. As a matter of fact, it is shown that it was on the B. & O. that the uses of railroad transportation in war were first worked out. As E. A. Pratt pointed out in his notable "Rise of Rail-Power in War and Conquest," (published in Great Britain in 1915) the military mind was slow to recognize the worth of the civilian railroad and slower yet to learn to co-operate with railroad staffs in joint enterprises; he reminded his readers that the whole thing was worked out not in warring Europe, but largely in our own Civil War, and on the B. & O. That story is told in detail in Prof. Summer's book. And as troublesome times have come again upon us, who can say that the problem of mixing army officers and railroad men has yet been solved? A reading of this book will bring to light its beginnings.



# NEWS

## Fla. Streamliners Placed in Service

Fanfare and ceremony attend  
initial runs of six new trains  
of three Southern roads

Six brand-new, lightweight, stainless steel de-luxe trains, designed entirely for the comfort of the coach passenger, went into service last week with much ado and public christenings. Five of the new trains are in regular service between New York and Florida points and one furnishes a daily intra-Florida service between Jacksonville and Miami. Turned out by the Edward G. Budd Manufacturing Company plant within the space of a few days, the six trains of seven cars each comprise a record consignment of light-weight equipment.

The Seaboard Air Line first presented its new equipment to the public December 1, on track No. 3, Pennsylvania station, New York, the entrance and stairway to which were decorated with palms, Spanish moss and other Floridian vegetation brought up North for the occasion. At about 1 p. m., Mary Jane Walsh, star of the current musical comedy "Too Many Girls" christened the train in customary fashion and at 3:30 it pulled out on its initial run to Miami. When the train reached Jacksonville, Florida's northern metropolis, at 9:40 the following morning a group of debutantes were on hand to extend welcome and the five-minute scheduled stop permitted a brief program of talks by railroad and civic officials.

The new equipment thus dedicated is one of two new seven-car trains which the Seaboard has added to its original "Silver Meteor," which has been in service since February 2 between New York and resorts on both coasts of Florida with departure every third day. The festive December 1 run inaugurated daily service to Jacksonville, Miami and other east coast points, while third day service will be continued to Tampa, St. Petersburg and west coast points.

Three of the new trains, named the "Champion," were placed in a new joint service by the Atlantic Coast Line and Florida East Coast on the same date between New York and Miami, the A. C. L. owning two and the F. E. C. one set of equipment. One of the A. C. L. "Champions" was placed on public exhibit on track No. 2, in Pennsylvania station, New York, all day December 3, amidst appropriate floral decoration of ferns and poin-

cianas. A loud-speaker was set up on the track platform to convey information to visitors concerning appointments, fares, etc., while inside portable enunciators were used by uniformed passenger representatives to point out detailed features. At 12:30 p. m., an A. C. L.-owned set of equipment departed from track No. 15 on the maiden south-bound "Champion" run. Aboard was Miss Betty Creighton, a Pittsburgh, (Pa.) secretary and winner of the Coast Line's "Name Contest" in selecting the title for the train, who christened the train during its stop at Washington, D. C. Further ceremonies were held at station stops along the line, climaxed by an elaborate reception program at the terminal city, Miami, on December 2, to the tune of klieg lights, music by a large band and an aerial salute.

The sixth train of the new "batch" was purchased by the Florida East Coast to provide a daily round-trip service between Miami and Jacksonville under the title "Henry M. Flagler." Receptions were held along the route of the train on a special pre-inaugural run southbound November 29, started off by an elaborate program at Jacksonville in which Miss Ophelia Strum, daughter of Federal Judge L. W. Strum, broke a bottle of vintage wine over the front of the new Diesel-electric locomotive which is to haul the train regularly. At 6:15 p. m. the "Flagler" arrived in Miami where it was welcomed by the 50-piece Miami University band and a group of addresses lauding both the train and the Florida hotel and railroad pioneer whose name it bears. Regular service was not inaugurated until December 3, although the "Flagler" was operated side by side with the first "Champion" south from Fort Lauderdale to Miami on the maiden run of the latter, the north-bound track having been taken out of ordinary service for the occasion.

Both the "Champion" and the "Silver Meteor" run on a 25-hour schedule between New York and Miami, the three sets of equipment for each road permitting daily departure from each of the termini. They are hauled by P. R. R. electric locomotives between New York and Washington, D. C., and beyond by Diesel-electric locomotives recently built by the Electro-Motive Corporation.

## Retirement Board Names Regional Director for Seattle

Walter J. Macklin, acting regional director for the Railroad Retirement Board at Seattle, Wash., has been promoted to director. He was formerly senior fiscal accountant in the San Francisco, Calif., region.

## All Truck Help I. C. C.'s Baby Now

Three-judge court gives I. C. C.  
the worry over all labor  
in the for-hire field

Upholding the contention of American Trucking Associations and affiliated complainants, a statutory three-judge court of the United States District Court for the District of Columbia has ruled in a two-to-one decision that the Interstate Commerce Commission was in error in holding that its authority to prescribe maximum hours of service of common and contract motor carrier employees was limited to prescribing such regulations for those employees whose activities affect the safety of operations, i.e., for drivers only.

The commission decision was in Ex Parte No. MC-28, which was reviewed in the *Railway Age* of May 20, page 880. In that proceeding motor carriers generally had contended for I. C. C. hours-of-service regulation for all their employees, while organized labor representatives wanted the disclaimer of jurisdiction so that the non-operating employees would come under the Fair Labor Standards Act.

The majority court decision examined pertinent provisions of the Motor Carrier Act and interpreted the word "employees" as being "inclusive." "If," says the court, "Congress had intended to distinguish between those employees engaged in actual operation of motor vehicles and those engaged in other work, it could have done so as it did in a former statute (the Hours of Service Act), by the addition of less than half a dozen words. Hence to read that limitation into the section would be not only to disregard the letter of the law but to find, without guide or compass in the Act, a legislative intent to that end. To the contrary, such guide as there is—outside the distinct and definite meaning of the words—supports the view that Congress used the language of the section advisedly, and meant precisely what it said. For the third paragraph of section 204, which concerns private carriers, expressly limits the power of the commission over qualifications and hours of those employees whose work relates to safety of operation. The distinction between the two classes of carriers is convincing of a definite purpose. . . ."

Turning next to the question of whether "giving effect to the words of the statute" would create a situation so "glaringly absurd" as to impel the conclusion that Con-

(Continued on page 904)

## R. I. Can't Fire Men in Merger

I. C. C. upheld in stipulating job protection in allowing merger of C. R. I. & G.

The question of whether the Interstate Commerce Commission can require a railroad to take care of displaced employees before it will authorize a merger or consolidation was answered in the affirmative on December 4 when a unanimous United States Supreme Court, in an opinion written by Justice Stone, decided against the carrier in the case of the United States and the Interstate Commerce Commission versus the Chicago, Rock Island & Pacific. Hereafter, organized railroad labor will be protected in any consolidation or merger case, whether an intra-system or an inter-system one, if it can prevail upon the commission to attach to the grant of power for the merger certain protective conditions for employees to be adversely affected.

The case began its long journey to the Supreme Court when the commission authorized the Rock Island to lease the properties of its wholly-owned Texas subsidiary, the Chicago, Rock Island & Gulf, with the express condition that the carrier would make certain provisions for those employees who would be discharged by the merger and also those who might be caused pecuniary loss because of the transfer of their positions and place of work from Fort Worth, Tex., to Chicago. Details of the commission's labor provisions were given in the *Railway Age* for November 12, 1938, page 717.

Originally, Division 4 authorized the lease, but attached the above-mentioned conditions; the railroad appealed for a hearing before the full commission which heard oral argument and sustained Division 4. Commissioners Caskie and Mahaffie, the latter being joined by Commissioners Lee and Miller, dissented in part, taking the position that the commission had never been given the power by Congress to lay down such conditions precedent to the merger. The railroad then began a suit in the United States District Court in Chicago, asking that the commission be enjoined from enforcing that part of the order requiring the acceptance of the labor conditions. The District Court decided in favor of the railroad, holding that it should be permitted to merge its subsidiary, but specifically denying the commission the authority to impose the conditions. The commission then appealed the case directly to the Supreme Court where oral argument was heard by that body on November 6, details of which were given in the *Railway Age* for November 11, page 758.

Justice Stone, in writing the opinion of the entire court, based his reasoning on two premises, first, that the imposition of the labor conditions would tend to preserve labor peace in the industry, and secondly, that Congress had intended the present law to encompass such power as is evidenced

### Special Xmas Fares for East and South

Carriers in Central, Trunk Line and New England territories are offering special reduced round-trip coach fares for travel during the Christmas holiday season at two cents per mile, or, as the tariff circular puts it, a round-trip fare for coach travel based on 1 1/3 times the regular one-way first-class fare (3 cents per mile). The special tickets will be on sale December 21 to January 1 and are valid going until January 1 and returning until January 7 in Trunk Line and Central territories and January 10 in New England. Inasmuch as the roads outside New England already have a round-trip coach rate which decreases as distance increases, the special Christmas rate will afford a saving only up until the one-way journey exceeds 450 miles, beyond which the sliding scale rates, which are lower than two cents per mile, will be applicable. A minimum fare of \$1 is also stipulated.

The Southeastern railroads, on which a basic coast rate of 1.5 cents is currently in effect with a 10 per cent reduction for round-trip with a 15-day return limit, will waive the latter limit for trips starting December 21 to January 1, inclusive, with January 10 as the special return date limit.

The Boston & Maine and Maine Central have announced that, in addition to the special round-trip fares described above, they will sell one-way coach tickets at one-cent-per-mile good for travel locally on the two lines December 24, 25, and 31 and January 1.

by the fact that the last Congress passed and sent to conference the House and Senate versions of S. 2009, the omnibus transportation bill, which contains a similar provision to that which the Rock Island is contesting in the instant case.

As a preface to his argument and in reviewing the facts of the case, Justice Stone pointed out that the maximum cost to the Rock Island of complying with the conditions would be \$290,000 spread over a period of five years, during which the savings effected by the lease would be not less than \$500,000.

"One must disregard the entire history of railroad labor relations in the United States," Justice Stone wrote, "to be able to say that the just and reasonable treatment of railroad employees in mitigation of the hardship imposed on them in carrying out the national policy of railway consolidation, has no bearing on the successful prosecution of that policy and no relationship to the maintenance of an adequate and efficient transportation system."

Continuing his opinion, the Justice said that "The now extensive history of legislation regulating the relations of railroad employees and employers plainly evidences

(Continued on page 904)

## River "Savings" Don't Fool Joe

Cheaper for U. S. to subsidize shippers by rail than to dig canals for them

"It would be more economical for the government not to construct and maintain the waterways but instead to use an equivalent amount of money as a subsidy to the railroads in exchange for lower rates," said Chairman Eastman of the Interstate Commerce Commission in his dissent to the commission's recent decision granting the railroads conditional fourth-section relief to meet anticipated competition from private barge operations for petroleum-products traffic from the New Orleans, La.,-Baton Rouge group and Mobile, Ala., to points on the recently-improved Tennessee River. Mr. Eastman did not disagree with the majority view that the railroads should be permitted to meet the anticipated competition, but he thought they should do it without fourth-section relief, i.e., with cuts also in rates to intermediate points which the chairman has always deemed to be too high.

The majority report did not give the railroads all they asked in their petition which sought a rate of 21 cents on gasoline from points in the New Orleans-Baton Rouge group to Florence, Ala., Sheffield, Decatur, Guntersville and Chattanooga, Tenn. The relief was found justified in connection with a 25-cent rate to the first four points and a 27.5-cent rate to Chattanooga. With respect to the rates from Mobile it was further found that they should not exceed the rates from the New Orleans-Baton Rouge group to the same destinations by more than 3.5 cents. Another finding was to the effect that the decision in *Petroleum and Its Products*, 171 I. C. C., 286,346, requiring the maintenance of rates from the New Orleans-Baton Rouge group in relation to rates from southwestern origin groups should be modified to the extent necessary to permit the establishment of the rates authorized without similar changes in rates from other southwestern origin groups other than El Dorado, Ark. Separate concurring expressions were filed by Commissioners Miller, Splawn and Caskie; while dissents of Commissioners Porter and Lee are noted. Commissioners Alldredge and Patterson did not participate in the disposition of the proceeding which was docketed as Fourth Section Application No. 17413.

The "anticipated" competition which prompted the railroads to seek relief was the oil companies' threat to go in for private transportation unless they got reduced rates to the specified landings on the Tennessee which, the report points out, "has recently been made navigable as far as Chattanooga." Although the fourth section prohibits the granting of relief from its provisions on account of "merely potential" water competition "not actually in existence," the majority got around that with its finding that "in determining whether competition by water is actual or



merely potential, the fact that there has been no movement by water is not always controlling." It goes on with citations to conclude that "The essential elements are present when the facilities for transportation by water are available and may be utilized by shippers at a cost which makes it more economical to use that form of transportation in preference to shipments by rail at the prevailing rail rates." Although Chairman Eastman suggested that "this construction strains the statutory language almost to the breaking point," he was not disposed to quarrel with it, because "it has much practical sense to commend it."

The chairman's dissent had previously called the Tennessee river the most recent of the waterways adapted "at government expense" to barge operation on an extensive scale. "These waterways," Mr. Eastman continued, "are now costing and will continue to cost the taxpayers of this country very substantial amounts annually for interest on the investment and for maintenance, inasmuch as no charge is made against the users of the waterways. If the railroad rates are reduced, the traffic will not move by the waterways, and the taxpayers' money will have been and will be spent for the purpose, so far as this traffic is concerned, of giving the Standard Oil and other big oil companies the benefit of cuts in railroad rates. It is possible, of course, that they may pass some of this benefit on to the consumers, but the circumstantial evidence is against this possibility. The oil companies have apparently used every resource at their command to get these rates down, and they would hardly have done that merely in an altruistic effort to benefit consumers. After it is all over, the oil companies will have their reduced rates, the taxpayers will continue to pay interest and maintenance on account of the waterways, and the railroads will have a new hole in their revenues which they must fill up at the expense of some other traffic if it is not to impair their ability to serve the public."

"If this were a unique or unusual situation, it would not be so disturbing, but it bids fair to become the rule rather than the exception, so far as our inland waterways are concerned. The fact is that shippers have no particular interest in water transportation in and of itself. Other things being anywhere near equal, they mostly prefer rail transportation. Low rates are what they want, and if new waterways will give them such rates by rail, they will be entirely satisfied, regardless of whether a pound of traffic moves over the waterways. I cannot see, however, how the taxpayers can be satisfied with such a result..."

Here followed Chairman Eastman's above-mentioned suggestion that it would be more economical to use the money spent on inland waterways as a subsidy to the railroads in exchange for lower rates. He proceeded to outline his views with respect to the specific issues in the proceeding reaching his above-mentioned conclusion that the fourth-section relief should be denied. "If rates no higher than are proposed at the river points are maintained to the intermediate points," Mr.

Eastman contended in that connection, "they will yield the railroads excellent earnings."

### The Canadian Roads in October

In October the Canadian National had net operating revenue of \$5,453,848, as compared with \$4,650,861 last year. Operating revenues were \$21,943,155 (up \$2,008,002) and operating expenses were \$16,489,307 (up \$1,205,015).

For the ten months, net operating revenue has been \$12,106,202 (up \$9,910,595). Ten months' gross totaled \$164,189,092 (up \$13,916,505) and operating expenses were \$152,082,890 (up \$4,005,910).

The Canadian Pacific in October had \$5,844,165 for net operating revenue, as compared with \$6,046,430 last year. October gross was \$16,667,801 (down \$266,745) and expenses were \$10,823,635 (down \$64,480).

For the ten months, C. P. R. gross reve-

nues have been \$122,112,223 (up \$4,831,541) and expenses have totaled \$103,562,648 (down \$340,809). Net operating revenues for the ten months totaled \$18,549,575, an increase of \$5,172,350.

### I. C. C. Income and Balance Sheet Items for September

The Interstate Commerce Commission on December 1 made public its latest monthly compilation of selected income and balance sheet items, showing September's net income of the Class I roads as \$41,078,314, and the net deficit for this year's first nine months as \$33,267,314, as reported previously by the Association of American Railroads and noted in the *Railway Age* of December 2. The foregoing compare with a September, 1938, net income of \$6,394,960, and a deficit of \$175,570,193 for last year's first nine months.

Eighty-nine roads reported net incomes

### SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS

Compiled from 133 Reports (Form IBS) Representing 138 Steam Railways  
(Switching and Terminal Companies Not Included)

#### TOTALS FOR THE UNITED STATES (ALL REGIONS)

For the month of Sept.		For the nine months of	
1939	1938	1939	1938
<b>Income Items</b>			
\$86,435,176	\$50,406,296	\$355,009,887	\$205,444,835
10,945,707	11,262,649	99,557,823	102,449,619
97,380,883	61,668,945	454,567,710	307,894,454
1,865,608	1,976,647	17,441,716	18,013,655
95,515,275	59,692,298	437,125,994	289,880,799
<b>6. Fixed charges:</b>			
13,945,545	12,502,399	104,448,211	97,758,870
39,346,566	39,563,173	135,630,091	135,658,117
131,719	219,192	1,194,128	1,918,088
53,423,830	52,284,764	461,272,430	456,335,132
42,091,445	7,407,534	*24,146,436	*166,454,333
<b>7. Income after fixed charges</b>			
1,013,131	1,012,574	9,120,878	9,115,860
41,078,314	6,394,960	*33,267,314	*175,570,193
<b>8. Contingent charges</b>			
16,866,171	16,858,599		
4,419,280	1,893,787		
643,503	1,691,102		
554,325	464,325		
<b>10. Depreciation (Way and structures and Equipment)</b>			
<b>11. Federal income taxes</b>			
<b>12. Dividend appropriations:</b>			
12-01. On common stock			
12-02. On preferred stock			
<b>Selected Asset Items</b>			
13. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)		Balance at end of September	
		1939	1938
		\$631,338,119	\$652,004,994
14. Cash		510,424,200	409,313,075
15. Demand loans and deposits		21,937,402	9,824,587
16. Time drafts and deposits		22,721,459	18,522,021
17. Special deposits		64,496,689	61,792,536
18. Loans and bills receivable		1,784,269	1,554,921
19. Traffic and car-service balances receivable		62,351,065	53,407,367
20. Net balance receivable from agents and conductors		56,526,957	47,906,751
21. Miscellaneous accounts receivable		124,712,482	126,917,065
22. Materials and supplies		304,638,536	329,883,542
23. Interest and dividends receivable		18,474,035	21,051,209
24. Rents receivable		1,350,625	1,520,527
25. Other current assets		8,129,621	6,515,420
26. Total current assets (items 14 to 25)		\$1,197,547,340	\$1,088,209,021
<b>Selected Liability Items</b>			
27. Funded debt maturing within 6 months§		Balance at end of September	
		1939	1938
		\$169,703,746	\$78,379,088
28. Loans and bills payable‡		236,741,762	242,689,641
29. Traffic and car-service balances payable		83,286,297	73,155,288
30. Audited accounts and wages payable		218,870,479	218,433,851
31. Miscellaneous accounts payable		67,717,641	70,496,729
32. Interest matured unpaid		943,346,091	791,535,248
33. Dividends matured unpaid		10,982,928	9,278,056
34. Funded debt matured unpaid		800,728,057	629,005,618
35. Unmatured dividends declared		1,338,920	1,188,977
36. Unmatured interest accrued		88,183,411	91,398,400
37. Unmatured rents accrued		23,419,200	23,009,797
38. Other current liabilities		31,489,190	27,539,772
39. Total current liabilities (items 28 to 38)		\$2,506,103,976	\$2,177,731,377
<b>40. Tax liability (Account 771):</b>			
40-01. U. S. Government taxes		\$70,185,757	\$53,746,881
40-02. Other than U. S. Government taxes		168,423,812	169,341,384

\* Deficit or other reverse items.

† Represents accruals, including the amount in default.

‡ For 100 railroads not in receivership or trusteeship the net income or deficit was as follows: September 1939, \$42,604,094; September 1938, \$17,897,617; 9 months 1939, \$60,221,792; 9 months 1938, \$46,597,929.

§ Includes payments which will become due on account of principal of long-term debt (other than that in Account 764, Funded debt matured unpaid) within six months after close of month of report.

¶ Includes obligations which mature not more than 2 years after date of issue.

# NET INCOME OF LARGE STEAM RAILWAYS WITH ANNUAL OPERATING REVENUES ABOVE \$25,000,000

(Switching and Terminal Companies Not Included)  
Net income after deprec.

Net income before deprec.

Name of railway	For the nine months of		For the nine months of	
	1939	1938	1939	1938
Alton R. R. ....	\$970,306	\$1,423,762	\$777,523	\$1,175,300
Atchison, Topeka & Santa Fe Ry. System <sup>†</sup> ..	3,251,199	3,252,504	12,117,964	12,231,997
Atlantic Coast Line R. R. ....	825,271	1,451,385	733,693	1,099,985
Baltimore & Ohio R. R. ....	4,362,487	12,543,443	1,019,105	7,061,317
Boston & Maine R. R. ....	94,814	3,569,093	1,059,840	2,359,542
Central of Georgia Ry. <sup>†</sup> ..	2,111,712	2,444,016	1,473,222	1,803,596
Central R. R. of New Jersey ....	2,613,630	2,991,153	1,562,240	1,930,083
Chesapeake & Ohio Ry. ....	16,454,501	12,859,289	22,638,919	19,082,782
Chicago & Eastern Illinois Ry. <sup>†</sup> ..	1,305,610	1,504,631	852,599	1,050,501
Chicago & North Western Ry. <sup>†</sup> ..	9,506,700	13,455,448	5,790,818	9,656,275
Chicago, Burlington & Quincy R. R. ....	123,151	399,966	3,783,704	4,209,993
Chicago Great Western R. R. <sup>†</sup> ..	350,811	1,320,611	51,612	917,230
Chicago, Milwaukee, St. Paul & Pacific R. R. <sup>†</sup>	14,173,668	15,466,684	9,835,791	11,164,081
Chicago, Rock Island & Pacific Ry. <sup>†</sup> ..	7,387,420	9,889,297	4,313,366	6,747,693
Chicago, St. Paul, Minneapolis & Omaha Ry.	2,168,335	2,192,225	1,733,722	1,751,625
Delaware & Hudson R. R. ....	909,979	996,305	1,668,340	211,541
Delaware, Lackawanna & Western R. R. ....	1,291,534	3,652,194	535,418	1,800,369
Denver & Rio Grande Western R. R. <sup>†</sup> ..	4,206,804	5,458,585	3,300,664	4,562,157
Elgin, Joliet & Eastern Ry. ....	917,452	479,094	1,631,470	271,915
Erie R. R. (including Chicago & Erie R. R.) <sup>‡</sup>	3,037,049	9,784,911	280,819	6,979,361
Grand Trunk Western R. R. ....	2,531,905	4,583,998	1,657,967	3,740,231
Great Northern Ry. ....	1,764,306	2,568,770	4,529,296	221,676
Illinois Central R. R. ....	957,772	1,352,668	3,951,971	3,518,000
Lehigh Valley R. R. ....	882,634	3,224,004	703,176	1,599,319
Long Island R. R. ....	1,268,568	1,444,377	385,777	562,068
Louisville & Nashville R. R. ....	3,849,229	619,252	7,101,026	3,866,440
Minneapolis, St. Paul & Sault Ste. Marie Ry. <sup>†</sup>	4,493,662	5,176,570	3,579,260	4,254,817
Missouri-Kansas-Texas Lines ....	2,731,867	3,082,167	1,742,537	2,086,888
Missouri Pacific R. R. <sup>†</sup> ..	11,315,203	12,114,494	8,045,448	8,831,988
New York Central R. R. <sup>†</sup> ..	5,779,923	21,433,123	6,120,553	9,359,595
New York, Chicago & St. Louis R. R. ....	588,309	1,848,943	1,761,583	572,964
New York, New Haven & Hartford R. R. <sup>†</sup> ..	3,981,788	11,327,076	1,451,100	8,773,540
Norfolk & Western Ry. ....	18,866,206	11,459,233	22,658,799	15,201,256
Northern Pacific Ry. ....	4,527,828	7,125,066	1,992,584	4,577,576
Pennsylvania R. R. ....	13,467,397	2,148,507	33,406,827	21,225,840
Pere Marquette Ry. ....	697,665	2,713,557	1,071,136	913,442
Pittsburgh & Lake Erie R. R. ....	1,463,740	909,443	3,145,638	2,592,924
Reading Co. ....	2,578,494	1,178,974	4,911,925	3,533,431
St. Louis-San Francisco Ry. <sup>†</sup> ..	7,653,964	9,533,111	5,355,096	7,188,634
St. Louis Southwestern Lines <sup>†</sup> ..	1,979,814	1,299,223	1,515,611	833,247
Seaboard Air Line Ry. <sup>†</sup> ..	5,177,247	6,150,053	3,560,884	4,618,802
Southern Ry. ....	1,649,054	3,332,890	4,254,416	1,043,407
Southern Pacific Transportation System <sup>†</sup> ..	1,724,389	9,293,444	7,608,785	3,090,044
Texas & Pacific Ry. ....	219,593	504,508	1,121,354	1,401,403
Union Pacific R. R. (including leased lines)	9,487,884	8,746,408	15,037,171	14,229,333
Wabash Ry. <sup>†</sup> ..	4,108,451	5,549,828	2,496,353	3,935,925
Yazoo & Mississippi Valley R. R. ....	361,003	144,876	6,295	258,140

\* Deficit.

† Report of receiver or receivers.

‡ Report of trustee or trustees.

§ Under trusteeship, Erie R. R. only.

† Includes Atchison, Topeka & Santa Fe Ry., Gulf, Colorado & Santa Fe Ry., and Panhandle & Santa Fe Ry.

‡ Includes Boston & Albany, lessor to New York Central R. R.

§ Includes Southern Pacific Company, Texas & New Orleans R. R., and leased lines. The report contains the following information: "Figures reported above for Southern Pacific Transportation System exclude offsetting debits and credits for rent for leased roads and equipment, and bond interest, between companies included therein. Operations for 1939 of separately operated solely controlled affiliated companies (not included in above statement), resulted in a net deficit of \$388,144 for the month and \$4,523,669 for the period. These results include \$211,172 for the month and \$1,900,549 for the period, representing interest on bonds of such companies owned by Southern Pacific Company not taken into income by Southern Pacific Company and, therefore, not included in the 1939 income results for the system reported above. The combined results for 1939 for Southern Pacific Transportation System and separately operated solely controlled affiliated companies for the month amounted to a net income of \$2,790,548 and for the period a net deficit of \$898,731."

for September, while 41 reported net deficits; in September, 1938, there were 62 net incomes and 68 net deficits. The consolidated statement and that showing the net incomes or net deficits of roads having operating revenues above \$25,000,000 are shown in the accompanying tables.

## Suspends Proposed Cut in Export Grain Rates

The Interstate Commerce Commission has suspended from December 1, until July 1, 1940, the operation of schedules proposing to reduce the carload commodity rates on ex-lake grain for export from Toledo, Ohio, to Baltimore, Md., Norfolk, Va., and Newport News.

## I. C. C. Grants M. P. Trucking Application

The Interstate Commerce Commission, Division 5, has conditionally granted the Missouri Pacific a certificate for common-carrier trucking operations over specified routes between McGehee, Ark., and Warren, and between certain points in Louisi-

ana. The conditions are the usual ones designed to insure that the highway service involved will be auxiliary to or supplemental of M. P. rail services.

## Nebraska Truckers Request Rate Changes

Abandonment of the "air-line" truck rate basis and the classification set up in Nebraska last February by the Nebraska State Railway Commission has been requested by the Nebraska Commercial Truckers Association in a formal communication to the commission. The truckers state that the unique Nebraska system has "created a chaotic and complicated condition in the application and interpretation of rates." In place of the "air-line" rate, the Nebraska truckers request an actual mileage scale, adoption of the National Motor Freight classification for commodities and the present scale of class rates, designating a sufficient number of classes to permit the application of ratings as named in the National Motor Freight classification and the exceptions. The truckers contend that the present arrange-

ment and classification have worked decided hardships on the Nebraska truckers because their rates, by virtue of a limited classification, are not nearly so flexible or graduated as the rates used by the rails. They also state that adoption of the National Motor Freight classification would make for uniformity between Nebraska and other states.

## Frisco Plans Kansas City-Oklahoma City Train

The St. Louis-San Francisco is planning to place a modernized fast passenger train in service between Kansas City, Mo., and Oklahoma City, Okla. Under the proposed schedule the train will leave Kansas City at 8:30 a. m., arriving in Tulsa at 1:26 p. m. and Oklahoma City at 3:45 p. m., while returning it will leave Oklahoma City at 12:01 p. m., and arrive in Tulsa at 2:15 p. m. and Kansas City at 7:15 p. m.

## T. & P. Affiliate Gets Truck Certificate

The Interstate Commission, Division 5, has granted a certificate to the Texas & Pacific Motor Transport Company, affiliate of the Texas & Pacific, for common-carrier operations in connection with a co-ordinated train-truck service between Marshall, Tex., and Texarkana. The authorization is subject to the usual conditions designed to insure that the highway service will be supplemental to T. & P. or Jefferson & Northwestern train services.

## Court Cuts Reorganization Fee

Following limits set by the Interstate Commerce Commission, the federal district court at Chicago on November 29 allowed fees and expenses up to July 1 totaling \$77,629 to trustees, committees and their attorneys in the reorganization of the Chicago Great Western. This is less than one-third of the \$247,058 asked and represents the ruling of the commission that only fees that the property can afford to pay will be allowed. This is the first large railroad reorganization to be completed under the law and furnishes the first test of the commission's policy in that respect.

## N. Y. Museum Exhibits Railroadiana

The Museum of the City of New York has placed on exhibit a collection of approximately 500 items of historical railroad material under the title "Railroads to New York." Gathered by the museum in collaboration with the Railroadians of America, a "fan" organization, the exhibit includes models of locomotives and trains, lithographs, old timetables, posters, headlights, bells, lanterns and even such collectors' items as music sheets and china. It is expected that the exhibition will run until February 28. The museum is open daily from 10 a. m. to 5 p. m., except Sundays when the hours are 1 to 5 p. m.

## Ask I. C. C. to Reconsider Seatrain's Status

Six common carriers by water operating between North Atlantic and Gulf of Mexico ports have asked the Interstate Commerce Commission to reconsider its



1933 decision holding that Seatrain Lines, Inc., is not a car ferry. Among other contentions the petitioners assert that they have a "vital interest" in the pending application of the Texas & Pacific and Missouri Pacific to extend services operated in connection with Seatrain to Texas City, Tex. The commission's 1933 decision on the status of Seatrain was reviewed in the *Railway Age* of July 22, 1933, page 170

### Private Truckers' Meeting— Correction

In a news article describing the recent annual meeting of the National Council of Private Motor Truck Owners appearing in the *Railway Age* of December 2, page 859, it was erroneously reported that a resolution opposing federal regulation of private truckers failed to pass the meeting. The fact is that the Council passed a resolution, which is in conformity with its previous stand, "that regulation of the use of the public highways by private motor vehicles should be provided and administered by the various states and not by the federal government."

### Burlington Affiliate Would Acquire Bus Operations

The Burlington Transportation Company, a wholly-owned motor carrier subsidiary of the Chicago, Burlington & Quincy, has asked the Interstate Commerce Commission for authority to acquire the rights and property of the following bus lines:

Roy J. Robertson, doing business as the Scottsbluff-Sterling Motor Lines of Sterling, Colo., and operating between Alliance, Nebr., and Sterling, Colo.;

Joseph Franklin Lindsey, doing business as the Black Hills-Billings Stages of Sheridan, Wyoming, and operating between Sheridan, Wyo., and Deadwood, S. Dak.;

Roy and Estelle Copp, doing business as the Loup Valley Stages of Taylor, Nebr., and operating between Taylor, Nebr., and Grand Island;

And F. Alverson, doing business as the Grand Island-Broken Bow Stage Lines of Grand Island, Nebr., and operating between Broken Bow, Nebr., and Grand Island.

### Four Roads to Build Kansas City Market

The Atchison, Topeka & Santa Fe; the Chicago, Burlington & Quincy; the Chicago, Rock Island & Pacific and the Missouri Pacific have agreed on plans for a \$1,000,000 layout of unified team tracks and yards for handling fruits, vegetables and other perishable products at Kansas City, Mo. Located near the Missouri river at Grand Avenue, the new layout will provide adequate facilities of the most modern type for receiving, inspecting, unloading, holding, diversion and reconsignment of fruits, vegetables and produce, and will serve not only Kansas City but the entire Middle West.

Approximately 1,000,000 sq. ft. of the 27 acres of the proposed site have been placed under option. The plans provide for yards with a capacity of 500 cars, consisting of track space for receiving, inspecting and

diverting 400 cars and team tracks for unloading another 100 cars. To facilitate the handling of produce, the entire area will be flood lighted.

### November Employment 8.09 Per Cent Above 1938

Drops of 8.91 per cent in the maintenance of way and structures group and 1.64 per cent in the group embracing transportation employees other than train, engine and yard caused railway employment to decline 1.59 per cent—from 1,055,164 to 1,038,404—during the one-month period from mid-October to mid-November, according to the Interstate Commerce Commission's compilation based on preliminary reports. Meanwhile, the mid-November total was 8.09 per cent above the comparable 1938 figure and the index number, based on the 1923-1925 average as 100 and corrected for seasonal variation, stood at 57.7 for November as compared with October's 57.5 and November, 1938's, 53.4.

Save for the two mentioned at the outset, November employment in all groups was slightly above that of October, while all were above November, 1938. The largest increases in the latter connection were the rises of 16.11 per cent in the maintenance of equipment and stores and of 7.71 per cent in the train and engine service groups, respectively.

### October Locomotive Shipments

October shipments of railroad locomotives, as reported by builders to the Department of Commerce's Bureau of the Census, totaled 47 locomotives as compared with 35 in September and 10 in October, 1938. The total for this year's first 10 months was 278 as against 232 for the comparable 1938 period.

All 47 locomotives shipped in October were for domestic service, and the total included 19 steam locomotives, 24 Diesel-electrics and four of other types, which classification, a footnote explains, includes steam-electric, gasoline-electric, Diesel-mechanical, and gasoline-mechanical types. Unfilled orders at the end of October totaled 160 locomotives as compared with the revised figure of 136 as of September 30.

Data supplied by the Car Service Division of the Association of American Railroads on locomotive building in railroad shops, shows a total of 39 such locomotives placed in service during this year's first 10 months; locomotives on order in railroad shops at the end of October totaled 38, including 18 steam and 20 electrics.

### Freight Car Loading

Revenue freight carloadings for the week ended December 2, totaled 688,888 cars, according to the report of the Association of American Railroads issued on December 7. This was an increase of 12,372 cars, or 1.8 per cent above the preceding week, an increase of 40,354 cars, or 6.2 per cent above the corresponding week in 1938, and an increase of 68,563 cars, or 11.1 per cent, above the same week in 1937.

As reported in last week's issue, the loadings for the previous week ended No-

vember 25, totaled 676,516 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings For Week Ended Saturday, November 25			
Districts	1939	1938	1937
Eastern .....	143,118	116,062	116,826
Allegheny .....	150,257	102,704	102,027
Pocahontas .....	47,997	41,032	37,590
Southern .....	96,598	86,011	85,779
Northwestern .....	83,910	69,462	65,965
Central Western .....	105,486	100,726	98,492
Southwestern ..	49,150	45,661	49,083
Total Western Districts ....	238,546	215,849	213,540
Total All Roads	676,516	561,658	555,762
Commodities			
Grain and grain products ....	35,997	29,155	32,536
Live stock ....	13,779	13,770	12,348
Coal .....	134,334	120,001	121,438
Coke .....	11,357	6,758	6,820
Forest products .....	33,223	25,594	24,975
Ore .....	23,917	12,337	9,356
Merchandise l.c.l. ....	142,556	129,890	134,536
Miscellaneous ..	281,353	224,153	213,753
November 25 ..	676,516	561,658	555,762
November 18 ..	771,404	657,066	644,927
November 11 ..	785,961	636,446	685,926
November 4 ....	805,862	672,967	728,765
October 28 ....	834,096	708,590	768,024

Cumulative Total,  
47 Weeks ... 30,840,353 27,509,924 34,917,863

*In Canada.*—Carloadings for the week ended November 25 totaled 59,761, as compared with 58,370 in the previous week and 48,269 a year ago, according to the summation by the Dominion Bureau of Statistics. Congestion at western elevators was being relieved and loadings in the western division increased from 5,989 in the previous week to 8,566 and grain loadings in the eastern division also increased.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
Nov. 25, 1939 .....	59,761	25,009
Nov. 18, 1939 .....	58,370	26,373
Nov. 11, 1939 .....	54,734	25,987
Nov. 26, 1938 .....	48,269	20,828

Cumulative Totals for Canada:  
Nov. 25, 1939 ..... 2,312,339 | 1,073,635 || Nov. 26, 1938 ..... | 2,229,914 | 966,482 |
| Nov. 27, 1937 ..... | 2,406,847 | 1,240,091 |

### W. P. A. Begins Special "Trade Barrier" Study in Nine States

"An analysis of statutes impeding the free flow of commerce between nine Eastern and Southern states which will be completed before the convening of their legislatures in January, 1940, has been inaugurated by the Marketing Laws Survey of the Work Projects Administration," says a December 6 statement from Commissioner F. C. Harrington.

The study, which is under the direction of A. H. Martin, Jr., director of the Marketing Laws Survey, Col. Harrington said, "will present a digest not only of the individual statutes which act as trade barriers, but also of the various administrative agency orders issued under the statutes."

The study is being made, the commissioner said, as the first undertaking of the interdepartmental committee on trade barrier legislation recently created by Secretary of Commerce Hopkins. Mr. Martin is the representative of the Federal Works Agency on this committee. The states to be covered are Massachusetts, New York, New Jersey, Rhode Island, South Carolina,

Virginia, Mississippi, Kentucky and Louisiana. The legislature, in each of these states, meets next January.

### W. H. Chandler Dies at 68

William H. Chandler, long known in traffic circles as the defender of New York's transportation interests, died on December 2 at his home in upper Montclair, N. J., at the age of 68. Mr. Chandler entered service with the Louisville & Nashville in 1887 as chief rate clerk, transferring in 1890 to the Central of Georgia. Two years later he entered the traffic department of that road's subsidiary, Ocean Steamship Company at New York and Savannah, Ga. In 1897 he left common carrier service to go with several industrial concerns as traffic manager. In 1908 he went to Boston, Mass., as New England freight agent for the Atlanta, Birmingham & Atlantic (now A. B. & C.). A year later he became traffic manager for the Boston Chamber of Commerce and in 1912 went to New York to join the newly-organized traffic bureau of the Merchants' Association there, becoming its manager in 1924, which post he retained until his death. Between 1933 and 1935 he obtained leave to serve as Eastern traffic assistant to the Federal Co-ordinator of Transportation.

Mr. Chandler has served as president and chairman of the executive committee of the National Industrial Traffic League and was president of the Association of Practitioners Before the I. C. C. in 1934 and 1935.

### New High in October for Air Line Traffic

Another all-time high for revenue passenger-miles flown on the domestic air lines has been recorded in October, according to figures made public December 3 by the Civil Aeronautics Authority. This marked the sixth month in a row that a new record had been set.

During the period from October 1 to October 31, inclusive, 70,122,138 revenue passenger-miles were flown by the 17 companies reporting their figures, an increase of 36.15 per cent over October, 1938. Pounds of express flown during October totaled 948,501; express pound-miles flown, 529,988,948. Figures for the first ten months of 1939 compared with figures for the corresponding period of 1938 showed passenger traffic 38.83 per cent ahead of last year; express traffic ahead by 24.14 per cent.

"Beyond the remotest doubt, most of the increased patronage of air lines by travelers can be laid to just one thing—increased safety," said Robert H. Hinckley, chairman of C. A. A., in releasing the above figures. "On November 30 there was completed a twelve-month period in which only two fatal accidents occurred on the entire domestic air line system. That indicates an average safety index for the past twelve months of approximately 80,000,000 passenger-miles flown for each passenger fatality. The best corresponding index for any calendar year up to and including 1938 was only 22,309,000. It has now been more than eight months since

there has been an accident on a domestic airline that resulted in an injury. Such volumes of passenger traffic as have been reported during recent months represent merely a foretaste of the traffic which will take to the air lines when air transportation realizes its full safety potentialities."

### Court Holds Chicago Stockyards is a Common Carrier

The United States Supreme Court at its December 4 session handed down a decision in the case of the Union Stock Yard & Transit Company of Chicago v. United States sustaining the Interstate Commerce Commission and holding that the services performed by the Union Stock Yard & Transit Company in loading and unloading livestock at its stockyards in Chicago, as specified in its tariffs filed with the commission, are common carrier services and are subject to the jurisdiction of the commission under Section 15 (7) of the Interstate Commerce Act. Mr. Justice Stone wrote the decision for a unanimous court.

The commission's decision which was upheld by the Court was that of July 16, 1938, which was reviewed in the *Railway Age* of July 23, 1938, page 165, and which reaffirmed its decision of December 11, 1935. The company had contended that it was not subject to the commission but only to the Secretary of Agriculture under the Packers & Stockyards Act. At that time the commission found that the proposed cancellation of the company's tariffs naming loading and unloading charges on livestock at the Union Stock Yards in Chicago was not justified and canceled the suspended schedules and discontinued the proceeding.

### Motor Carrier May Give Up Certificate Without I. C. C. Permission

Passing upon the complaint of the New Hampshire towns of Bristol and Hill with respect to an abandonment of motor bus service by the Boston & Maine Transportation Company, affiliate of the Boston & Maine, Division 5 of the Interstate Commerce Commission has found that the commission is without power under the Motor Carrier Act "to compel a motor carrier operating in interstate or foreign commerce to remain in business, if it desired to discontinue such operations entirely." In the specific case under consideration, however, jurisdiction was claimed (and the abandonment authorized) because the B. & M. T.'s other operations under the certificate involved left it subject to any orders of the commission "issued upon findings of public needs with respect to continuous and adequate service, consistent with its operating authority."

The bus service involved was operated from Franklin, N. H., through Hill to Bristol; and the above-mentioned finding authorizing the abandonment was to the effect that it would not be reasonable to require the B. & M. T. to resume the abandoned operations, but that the defendant should file application for modification of its certificate to that extent.

Division 5's majority report represented the views of Chairman Eastman and Com-

missioner Lee; Commissioner Rogers filed a separate "concurring" expression, agreeing with the majority view that the abandonment should be approved but dissenting "from that part of the decision which holds that we have no recourse under the act if a carrier abandons all operations authorized by a certificate."

In that connection the majority, after discussing contentions of complainants, set forth its disclaimer of jurisdiction in the following paragraph:

"No provisions corresponding to section 1(18)-(20) of part I were included in the Motor Carrier Act, and we believe it to be clear that it was not the intent of Congress that we should have power to compel a motor carrier operating in interstate or foreign commerce to remain in business, if it desired to discontinue such operations entirely. No doubt the comparatively small investment required for motor carrier operations and the ease with which they can be established or reestablished may have been the reason for this. But we believe it to be equally clear that so long as a motor common carrier holds an effective certificate from this commission authorizing it to conduct certain operations, it is under our jurisdiction to the extent provided by the act and must comply, among other things, with any lawful requirement we may establish under section 204(a)(1), with respect to continuous and adequate service."

### New Organization to Co-ordinate and Police Suggested

Formation of a new organization to co-ordinate and police all forms of transportation was urged by W. J. Williamson, general traffic manager of Sears, Roebuck & Company, in an address before the Junior Traffic Club of Chicago on December 5. Such an organization would be created, he said, through the co-operative efforts of all five types of transportation. "Let it have plenary powers," said Mr. Williamson. "Let its first job be the immediate prohibition and abolition of the senseless and destructive competitive warfare now going on among the carriers."

"The Interstate Commerce act prohibits carriers from showing preference, prejudice or discrimination. Yet government itself keeps on, year after year, manifesting preference for some carriers, prejudice against others, and discrimination. Equality of competitive opportunity has not yet been provided; government competition with privately financed transportation has not yet been eliminated. We talk and we talk and we do nothing. Out of all the meetings and conferences and expensive research, and passing of pious resolutions and press releases and reports, has come precisely nothing.

"During the last 20 years we have doubled our transportation plant, or at least we have doubled the capacity of our carriers. Here is an example of excess transportation facility. Between here and Cleveland there are six railroads. Each can handle business without the necessity of transferring it to another carrier at an intermediate junction. There are also 32 common carrier truck lines. I



don't know how many contract motor carriers there are. I don't know how many business houses are performing their own private transportation between Chicago and Cleveland.

"Between this city and Detroit there are six railroads and 32 common carrier truck lines. Between here and the Twin Cities there are six railroads and 23 common carrier truck lines."

Deeming such available services excessive, Mr. Williamson said that conflicts between carriers, and the failure of rail and motor carriers to construct a reasonable classification have driven many commercial and industrial houses into private transportation. "Characterized by high supervisory cost and high percentage of empty track mileage," he said, "this private transportation is not generally economically justified when we consider the whole national economy."

Delays experienced in conducting and concluding hearings were also scored by the speaker. Just think of the cumbersome Official Classification, its prolix and wordy rules, its three columns for Official, Southern and Western classifications," he declared. "Think of the innumerable exceptions, some with ratings, some with rules, and some with both. Contrast these and other annoyances with the classification troubles of the private shipper."

#### Readjusts F. E. C. Divisions on Citrus Fruit and Vegetable Traffic

The Interstate Commerce Commission in a report by Commissioner Miller has ordered a readjustment of the divisions accorded the Florida East Coast out of the Southern-territory proportion of joint through rates on fresh vegetables and citrus fruits moving from points on the F. E. C. to destinations in Eastern Trunk-Line and New England territories. The majority opinion describes the prescribed basis of divisions as one which will result in "substantially maintaining" the F. E. C.'s present revenue from the vegetable traffic, and "in a slight increase over its present divisions on citrus fruits." Because there will thus be "no radical change" in the revenue accruing to F. E. C., a retroactive adjustment is denied.

Chairman Eastman, dissenting, was not persuaded that the majority report gave the F. E. C. all the relief "to which it is justly entitled under the law." Commissioner Caskie, dissenting in part, discussed the issues at some length. He, too, thought the F. E. C. had not been given enough; in fact, he suggests that the prescribed basis may result in a reduction in the divisions which the F. E. C. receives. "As of the time of the submission of this case," Mr. Caskie says in closing, "the Florida East Coast was in a precarious financial condition. The consequences of this action of the majority, therefore, may be permanently to impair the ability of the Florida East Coast to furnish adequate and efficient transportation service." Commissioner Rogers did not participate in the disposition of the proceeding, which was docketed as No. 26459, and which grew out of F. E. C. complaints, assailing only the subdivision of the Southern factors of the through rates; it did not bring into issue

the entire joint through rates nor name the participating Northern lines among the defendants.

#### New Haven Ordered to Re-Open 72 Stations and Restore Service

The Massachusetts Department of Public Utilities, on November 28, ordered the New York, New Haven & Hartford to restore service within 10 days to 72 out of a total of 88 passenger stations in the Boston and southeastern Massachusetts area which were closed, and reinstitute passenger train runs which were eliminated, effective July 17, 1938. The order creates a problem for the road since the stations involved have been unused for more than 16 months, during which time they have suffered the results of vandalism and misuse. At least one "depot," it is reported, no longer exists, having been dismantled, several have been damaged by fire and some have been rented for use by other parties.

In issuing the order, the department has evidently taken its cue from a decision of the United States Supreme Court of November 6, affirming a Circuit Court of Appeals finding that a federal district court in charge of a railroad reorganization under Section 77 of the Bankruptcy Act is without power to order discontinuance of intrastate passenger service without authorization by the appropriate state regulatory commission. In its order the department declared that the New Haven trustees had failed "properly to establish a case" in their request for service curtailment, but has provided that "they may petition the department again without prejudice for written authority for the abandonment of certain passenger stations or for the discontinuance of certain local passenger service."

The 72 stations concerned are located on the Old Colony, Boston & Providence and New England lines operated by the New Haven, many of them in Greater Boston, while the passenger runs ordered restored were local services operated in the so-called East End territory.

The Department had previously ordered the road to re-open stations and run at least one round-trip daily between Yarmouth and Provincetown on Cape Cod, which line was closed to passenger service concurrently with the Boston station abandonments. This order has been appealed and is pending in the Massachusetts Supreme Court.

It is reported that the Department has granted the trustees a stay of its order for 30 days and that conferences between its members and New Haven officers to arrive at an agreement on service restoration began December 6.

#### Oil Truckers Ask Minimum Rate Three Times Rail Cost

Tank-truck operators, now "hanging on by the skin of their fingernails," can survive in the business of transporting petroleum and petroleum products from California to Arizona only if the Interstate Commerce Commission prescribes for them and competing railroads minimum rates equal to more than three times the Southern Pacific's cost and twice the

Atchison, Topeka & Santa Fe's cost of handling the traffic involved. Such in effect was the plea of their counsel—Wallace L. Ware, former president of the California Railroad Commission—at this week's oral argument in Washington, D. C., in the No. 27565 proceeding wherein the evidence included comparative cost data compiled in accordance with formulae developed by Arthur F. White, head cost analyst and assistant director of the commission's Bureau of Statistics.

As pointed out in the *Railway Age* of September 2, page 352, where the proposed report was reviewed, Examiner Frank E. Mullen recommended a finding that the railroad rates which have the competing tank truckers crying for help are higher than reasonable minimum charges. The key rate is the 33-cent charge per 100 lb. on gasoline from Los Angeles, Calif., to Phoenix, Ariz. One trucker's cost (excluding return on investment) for this haul are shown as 37.6 cents and another's as 38.8 cents, as against comparable figures of 11.1 cents for the Southern Pacific and 20.3 cents for the Atchison, Topeka & Santa Fe. Mr. Ware asked the commission to fix a 40-cent minimum rate for both trucks and railroads, arguing that the former needed that basis to survive. Counsel for the railroads, on the other hand, argued that none of the parties took exception to the results of the cost studies, and contended that the commission was therefore brought to the question of whether it would force increases in remunerative rail rates to a level at which the truck lines could operate profitably.

The railroad arguments were presented by J. E. Lyons, commerce attorney for the Southern Pacific, and G. E. Duffy, commerce attorney for the Santa Fe. After citing the above-mentioned fact that no one took exception to the results of the cost studies, Mr. Lyons referred to "a growing belief" among motor carriers that they are the only ones entitled to set the pace and make the competition. In this case, he added, the railroads have exercised their managerial discretion and "set the pace in Arizona." Responding to questions from Commissioner Mahaffie, the S. P. attorney said that the railroads want the present rates left alone, continuing to suggest that they want recognition of the fact that railroads, hauling in larger quantities, have lower costs per 100 lb.—if the commission believes "as supreme traffic managers" of all transport agencies that it should fix rail rates in relation to profitable motor carrier rates.

Chairman Eastman asked Mr. Lyons to repeat his characterization of the commission—the chairman laughingly explaining that he wanted it "straight on the record." Mr. Lyons replied that in his opinion the commission had assumed the "supreme traffic manager" role in its recent decision dealing with competitive rates on petroleum and its products in the Mountain-Pacific Northwest (see *Railway Age* of October 7, page 533). Next the S. P. attorney told Commissioner Rogers that in a case such as the one he was arguing, the costs of the competing agencies is the only factor which should be considered in fixing

minimum rates. Along the same line, Mr. Lyons agreed with Chairman Eastman's statement of his (Mr. Lyons') position as being one holding that under the minimum rate power the commission should never go above out-of-pocket costs; and he reminded the chairman that his complaint on the Northwest decision was that it fixed a minimum rail rate on the basis of the estimated cost of the competition.

Much of Mr. Duffy's argument was in support of his contention that under parity of rates the traffic tends to gravitate to the tank trucks. In that connection he mentioned especially the reciprocity factor, pointing out how gasoline shippers prefer if possible to employ the transport agency that consumes their product. He asserted that, because of the rate level unprofitable to them, the truckers have not solicited any Arizona business since 1936; yet they still retain about 35 per cent of the movement.

In addition to asking for the 40 cent rate Mr. Ware opposed any differential in favor of the railroads because of their larger loads. "If we don't get a compensatory rate," he said, "we're dead, and if we get differentials against tank trucks, we're shot twice in the same arena." Mr. Ware's plea was at times an eloquent and impassioned one. If the tank truck service "is not addressed to the public interest," he told the commission, "now is your opportunity to destroy it;" but he was confident that the commission would let the "light of public interest shine." Although he conceded that the railroads are the more economical agency for the handling of the traffic involved, Mr. Ware nevertheless criticized the cost formula introduced in the case by C. E. Day, engineer in charge of the S. P.'s Bureau of Transportation. The examiner's report said that the costs shown by the Day formula "do not differ materially from those obtained from the White formula." Because of this Mr. Ware saw "no point" in attempting to discredit the White formula also.

## R. I. Can't Fire Men in Merger

(Continued from page 898)

the awareness of Congress that just and reasonable treatment of railroad employees is not only an essential aid to the maintenance of a service uninterrupted by labor disputes, but that they promote efficiency, which suffers through loss of employee morale when the demands of justice are ignored."

After reviewing the history of railroad legislation in this country including the present bill pending in conference, Justice Stone reaches the conclusion that "In the light of this record of practical experience and congressional legislation, we cannot say that the just and reasonable conditions imposed on appellees in this case will not promote the public interest in its statutory meaning by facilitating the national policy of railroad consolidation; that it will not tend to prevent interruption of interstate commerce through labor disputes growing out of labor grievances, or

that it will not promote that efficiency of service which common experience teaches is advanced by the just and reasonable treatment of those who serve. In the light of that record, too, we do not doubt that Congress, by its choice of the broad language of Section 5 (4) (b) intended at least to permit the commission, in authorizing railroad consolidations and leases, to impose upon carriers conditions related, as these are, to the public policy of the Transportation Act to facilitate railroad consolidation, and to promote the adequacy and efficiency of the railroad transportation system."

He also felt that the "fact that a bill has recently been introduced in Congress and approved by both of its houses, requiring as a matter of national railway transportation policy the protection of employees such as the commission has given here, does not militate against this conclusion." The Court takes the position that the only "effect of this action was to give legislative emphasis to a policy and a practice already recognized by Section 5 (4) (b) by making the practice mandatory instead of discretionary, as it had been under the earlier act." Thus, the Court makes it entirely clear that it believes the commission now has a discretionary power to include such labor provisions if it should see fit.

The Rock Island does not have to obey these provisions unless it decides that it is economically worth while to go ahead with its plans for the lease of its subsidiary. The order of the commission was permissive to the extent that if the railroad desired to effect the merger, it had to abide by the commission's conditions.

## All Truck Help I. C. C.'s Baby Now

(Continued from page 897)

gress could not have intended such a result," the court (with "due deference to the dilemma of the commission") was "unable to say that this is true." "Certainly," it adds, "aside from the consumption of the commission's time, there is nothing glaringly absurd in this, nor reason to suppose a better agency could be found for the purpose. The commission's fear that it may be called upon to establish qualifications for executive officials, solicitors, and lawyers, is overstrained. None of these is within the category of 'employees' as that word is used in public service or labor legislation."

Summing up on the main point the court says: "In the view we take, the language of the disputed section is so plain as to permit only one interpretation, and we find nothing in the Act as a whole which can with any assurance be said to lead to a different result. The circumstances under which the section was placed in the bill may possibly have created a situation not contemplated by its sponsors, but to say that this is true would be pure speculation, in which we have no right to indulge and upon which we can base no conclusion. We are, therefore, obliged to

hold that the commission was mistaken in limiting its powers to the drivers of trucks and buses."

On the secondary question, raised out of a contention that the pertinent provisions of the Motor Carrier Act are unconstitutional because they lack the necessary definition of standards to guide the commission, the court saw no reason to doubt that "reasonable requirements with respect to maximum hours of service is quite as definite as 'reasonable rates'." It is "just another instance where Congress has expressed a policy, prescribed a standard, and left to the commission the duty of applying the policy and the standard to the facts of differing situations."

The majority opinion was filed by Chief Judge Groner of the Court of Appeals for the District of Columbia, and District Judge Bailey. District Judge Letts was the dissenter. The dissenting opinion conceded that a literal construction of the statute leads to the result announced in the opinion of the court; but Judge Letts was "not prepared to agree that Congress intended the result." He added that "the reason of the law should prevail over its letter." Continuing, the dissenting judge asserted that the inclusive language was not considered in committee, having been placed in the bill by amendment from the floor. "It would," he said, "extend the jurisdiction of the commission to social problems which Congress had no thought of doing"; and he was "unable to find standards in the language of the Act which will protect it from assault on constitutional grounds."

## Financial

AKRON, CANTON & YOUNGSTOWN.—*R. F. C. Loan*.—Division 4 of the Interstate Commerce Commission, at this company's request, has dismissed its application for a loan of \$5,750,000 from the Reconstruction Finance Corporation.

ALGERS, WINSLOW & WESTERN.—*Debentures*.—This company has asked the Interstate Commerce Commission for authority to issue and sell \$130,000 of its six-year 4½ per cent serial debentures, the proceeds to be used to refund certain bonds and to acquire one locomotive. The debentures will mature at the rate of \$26,000 on the first of December in each of the years from 1941 to 1945, inclusive.

ATLANTIC COAST LINE.—*Bonds*.—This company has asked the Interstate Commerce Commission for authority for the certification and delivery by the corporate trustee under its general unified mortgage, into the treasury of the company \$4,444,830 of its series A, 4½ per cent general unified mortgage bonds to repay the treasury for retiring a like amount of its convertible 6-30 year four per cent debenture bonds.

ATCHISON, TOPEKA & SANTA FE.—*Abandonment*.—The California, Arizona & Santa Fe and the Atchison, Topeka & Santa Fe, respectively, have been granted authority



by Division 4 of the Interstate Commerce Commission to abandon a line and the operation of a line extending from Blue Bell, Ariz., to the terminus of the line at Cordes, 2.7 miles.

**Dismissal of Application.**—Division 4 of the Interstate Commerce Commission, at the request of this company, has dismissed its application asking authority to abandon a line extending from Marland, Okla., to Lio.

**BESSEMER & LAKE ERIE. — Equipment Trust Certificates.**—This company has been authorized to assume liability for \$5,700,000 of 2½ per cent serial equipment trust certificates, maturing in 10 equal annual installments of \$570,000 on December 1 in each of the years from 1940 to 1949, inclusive. The issue has been sold at 104.696 to Freeman & Co., of New York City, making the average annual cost of the proceeds to the company approximately 1.6 per cent.

**CAROLINA, CLINCHFIELD & OHIO. — Acquisition.**—This company has requested authority from the Interstate Commerce Commission to acquire the properties of the Clinchfield Northern of Kentucky.

**CENTRAL RAILROAD OF NEW JERSEY. — Qualifications of Trustees.**—A petition asking that the Interstate Commerce Commission inquire into the qualifications of Shelton Pitney and Walter P. Gardner, who have recently been appointed trustees of this company in reorganization proceedings under section 77 of the Bankruptcy Act, has been filed by a protective committee representing some of the road's bondholders. The petitioners would have the commission find out whether or not the interests of some of the sponsors of the trustees are incompatible with those of the bondholders.

The committee also believes that certain former business connections of Mr. Pitney's "are counsel for parties whose interests are adverse to the interests of the bondholders as such". The petition went on to say that "While your petitioner has no information other than that Pitney is of the highest personal character," it is not aware of any qualifications that Mr. Gardner might have to qualify him for the position of co-trustee. The bondholders also want to know what interest the Reading has in the appointment of Mr. Pitney as a co-trustee.

**CHICAGO GREAT WESTERN. — Lease Authorized.**—The federal district court at Chicago on December 6 authorized the Chicago Great Western to execute a lease with the Pullman Standard Car Manufacturing Company involving \$200,000 for 100 flat cars, under the terms of which lease payments would apply toward eventual purchase of the cars.

**CHICAGO, ROCK ISLAND & PACIFIC. — Equipment Trust Certificates.**—This company has asked the Interstate Commerce Commission to approve a plan whereby it would issue and sell to the Reconstruction Finance Corporation \$2,680,000 of 2¾ per cent equipment trust certificates, maturing in 20 equal semi-annual installments beginning August 1, 1940. The proceeds

would be used in part payment for the purchase of 1,000 50-ton box cars and 10 Diesel-electric switching locomotives, costing a total of \$2,993,420.

**READING. — Abandonment by the Catsaquia & Fogelsville.**—The Catsaquia & Fogelsville and the Reading, respectively, have asked the Interstate Commerce Commission for authority to abandon that part of the line and the operation of the line known as the Breinigsville branch, extending 3.4 miles from a point 2.1 miles west of Brexkertown, Pa.

**SEABOARD AIR LINE. — Abandonment.**—This company has been authorized to abandon its Oats spur, extending easterly from Lydia, S. C., to Oats, 1.4 miles.

**SEABOARD AIR LINE. — Abandonment by the Charlotte, Monroe & Columbia.**—The Charlotte, Monroe & Columbia has asked the Interstate Commerce Commission for authority to abandon its entire line extending from Jefferson, S. C., to McBee, 17.2 miles.

**SEABOARD AIR LINE. — Bondholders' Plan of Reorganization.**—A plan of reorganization for this road, which has been in receivership since 1930, has been filed in the U. S. District Court at Norfolk, Va., by a committee for holders of its first and consolidated 6 per cent mortgage bonds headed by O. A. Glazebrook, Jr., of New York. The bondholders' plan calls for a reduction in funded debt from the \$306,500,000 now outstanding (including approximately \$89,000,000 accrued and unpaid interest to January 1, 1940) to \$17,576,000 and would wipe out present common and preferred stock totaling \$86,600,000. It makes no provision for the claims of the present adjustment mortgage bonds and unsecured creditors.

Total fixed and contingent interest under the plan would be \$3,382,172, as compared with over \$10,000,000 in 1938. Accruing under the plan the reorganized company would have a funded debt of \$77,576,000, of which not more than \$10,000,000 will be new first mortgage bonds (to be sold for cash), \$9,576,000 will represent receivers' equipment trust certificates to remain undisturbed and the balance of \$58,000,000 will be an issue of general mortgage income bonds convertible into common stock, interest to be payable if earned up to 4½ per cent.

A total of 3,000,000 shares of common stock would be issued, the 1,500,000 shares initially issuable being considered for purposes of allotment, as having a stated value of \$100.

Receivers' certificates (other than those recently called for redemption on December 29) are to receive 10 per cent in cash and the balance in general mortgage income bonds. The holders of other securities dealt with in the plan will receive general mortgage income bonds and shares of common stock in varying amounts.

**SOUTHERN PACIFIC. — Abandonment by the Pacific Electric.**—The Pacific Electric has asked the Interstate Commerce Commission for authority to abandon a total of 90.5 miles of interurban lines in the vicinity of Los Angeles, Calif., in the coun-

ties of Los Angeles, Orange, San Bernardino, and Riverside.

**SOUTHERN PACIFIC. — Abandonment by the Northwestern Pacific.**—Division 4 of the Interstate Commerce Commission has authorized the Northwestern Pacific, a subsidiary of the Southern Pacific, to abandon portions of its line consisting of ferry lines (a) between Sausalito, Calif., and Tiburon, 2.3 miles, and (b) between Sausalito, Calif., and San Francisco 6.5 miles.

**TONOPAH & TIDEWATER. — Abandonment.**—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon the operation of its line extending from Crucero, Calif., to Beatty, Nev., 143.4 miles. In its application for authority to abandon the operation, the company informed the commission that it intended to maintain the line, roadway and equipment in good repair in order that operations may be resumed when public convenience and necessity warrant such resumption.

**UTAH IDAHO CENTRAL. — Securities.**—The Utah Idaho Central Railroad Company, a new company recently formed to purchase at foreclosure sale the properties of a company by the same name, has asked the Interstate Commerce Commission for authority to acquire the old company from a bondholders' committee and to effect the purchase by the issuance of a sufficient amount of its four per cent first mortgage 10-year bonds to complete the purchase agreement with the committee whereby \$1,039,800 of the present outstanding first mortgage bonds with unpaid coupons attached, will be purchased for \$441,915 plus interest at a rate of five per cent per year to the date of consummation, or approximately \$460,000.

The bonds will be sold to the Reconstruction Finance Corporation. The petition states that the remainder of the purchase price will be made through the payment to the bondholders' committee of approximately \$959,700 of second mortgage income bonds and approximately 9,597 shares of no par value common stock. The first mortgage bonds will be issued for a 10-year period, will bear interest at the rate of four per cent, and will have a cumulative sinking fund of \$10,000 per year.

**VIRGINIAN. — Stock.**—This company has been authorized by Division 4 of the Interstate Commerce Commission to issue \$27,955,000 of six per cent cumulative preferred stock, consisting of 1,118,200 shares of a par value of \$25 each, and \$31,271,500 of common stock, consisting of 1,250,860 shares of a par value of \$25 each, in exchange for equal amounts of outstanding stock, consisting of 279,550 shares of preferred stock and 312,715 shares of common stock with a par value of \$100 each, respectively on the basis of four shares of the new stock for one share of the outstanding stock in each case.

#### Average Prices of Stocks and Bonds

	Dec. 5	Last week	Last year
Average price of 20 representative railway stocks..	32.41	33.68	29.30
Average price of 20 representative railway bonds..	58.43	59.15	59.58

## Equipment and Supplies

### Nov. Orders Way Over '38 Record

Buying of 41 locos., 7,691 freight and 8 pass. cars brings impressive totals

Equipment builders and company shops received orders for a total of 41 locomotives (34 Diesel-electric and 7 electric), 7,691 freight cars and 8 passenger-train cars during November. These purchases compare with 3 locomotives, 132 freight cars and 32 passenger-train cars ordered in November of last year. Totals for the 11 months of the year thus far progressed are thereby brought to 288 locomotives, 52,534 freight cars and 213 passenger-train cars, which are more than double the locomotive, in excess of four times the freight car and almost 1.5 times the passenger-train car totals for the corresponding period of 1938, respectively.

Manufacturers in the United States also booked orders for a total of 4 locomotives, 205 freight cars and 28 passenger-train cars for export, which additions bring the

foreign market total for the year thus far to 29 locomotives and 1,255 freight cars, while the passenger-car order is the first received this year. Canadian builders received orders for 50 locomotives, 4,565 freight cars and 10 passenger-train cars.

American rolling mills sold exactly 100,000 tons of rail during December, which brings the total for the 11 months to 1,329,847 tons. An order for 4,000 tons was also placed in Canada.

#### Baldwin to Build Stock Locomotives

An initial investment of more than \$2,000,000 is being made by The Baldwin Locomotive Works for facilities and stock to build 28 Diesel-electric switching locomotives of 1,000 and 660 hp. in line production so that certain types of railroad motive power can in future be chosen from stock. Two of the locomotives were recently demonstrated at its Eddystone, Pa., plant. The schedule calls for completion of the 28 engines for switching and transfer service, regardless whether orders for them are received beforehand. The completion of smaller type locomotives for stock purposes is a new policy for Baldwin. The two engines on display are powered by De La Vergne Diesels, manufactured by a Baldwin subsidiary; both are designed to provide good visibility, as a safety feature for yard service, and easy mechanical accessibility. The 1,000-hp. locomotive weighs 124 tons, while the

weight of the 660-hp. locomotive is about 100 tons.

#### PASSENGER CARS

THE RICHMOND, FREDERICKSBURG & POTOMAC is inquiring for six baggage-express cars.

#### MOTOR VEHICLES

THE SANTA FE TRAILS TRANSPORTATION COMPANY has ordered 22 air conditioned intercity buses powered with Hall-Scott horizontal engines from the a.c.f. Motors Company.

## Supply Trade

R. J. Van Meter, assistant to the vice-president of the Superheater Company, Chicago, has been promoted to manager of western sales and service.

H. P. Litchfield, branch manager at Newark, N. J., since 1925 for the Graybar Electric Company, Inc., New York, will be transferred to the general executive offices as general commercial sales manager. Mr. Litchfield will take over his new duties on December 18, and will report directly to G. F. Hessler, assistant general sales manager.

The Vanadium Corporation of America has moved its Pittsburgh, Pa., district sales office from its Bridgeville, Pa., plant to the Henry W. Oliver building, Pittsburgh. G. F. Fritsch is the Pittsburgh district manager of sales.

Walter F. Kasper, vice-president and vice-chairman of the board of Fairmont Railway Motors, Inc., Fairmont, Minn., has been elected president and chairman of the board, to succeed Howard M. Starrett, deceased, and has been succeeded by Robert H. McCune.

The Miller-Lewis Railroad Equipment Corporation, 80 Reade street, New York, has been appointed eastern representative of the Standard Car Truck Company, Chicago, and its division, Standard Car Sales, Inc., a recently formed corporation.

#### OBITUARY

Walter C. Lewis, employed by the National Malleable & Steel Castings Co. since 1906, and their sales agent in New York City for the last 19 years, died in Mt. Vernon, N. Y., on December 3, after a long illness.

#### TRADE PUBLICATION

"WROUGHT IRON." — This is the title given to a new edition of a 97-page illustrated book published by A. M. Byers Company, Pittsburgh, Pa. Completely rewritten, and with several chapters added, it describes the manufacture, characteristics and applications of wrought iron.

### Domestic Equipment Orders Reported in Issues of the Railway Age in November, 1939 (Including Dec. 2)

LOCOMOTIVES					
Date	Name of Company	No.	Type	Builder	
Nov. 4	Boston & Maine .....	3	Diesel-electric Sw.	Electro-Motive Corp.	
		1	Diesel-electric Sw.	American Locomotive Co.	
Nov. 18	New York Central .....	5	Diesel-electric Sw.	Electro-Motive Corp.	
Nov. 25	Newburgh & South Shore .....	1	Diesel-electric Sw.	American Locomotive Co.	
Nov. 25	Erie .....	3	Diesel-electric Sw.	Electro-Motive Corp.	
		4	Diesel-electric Sw.	American Locomotive Co.	
Dec. 2	Panama Railroad .....	5	Diesel-electric	General Electric Co.	
Dec. 2	Nevada Consolidated Copper .....	7	Electric	General Electric Co.	
Dec. 2	Central of Georgia .....	1	Diesel-electric Sw.	Electro-Motive Corp.	
Dec. 2	Tennessee Central .....	1	Diesel-electric Sw.	American Locomotive Co.	
Dec. 2	Chicago, Rock Island & Pacific .....	5	Diesel-electric Sw.	Davenport-Besler Corp.	
		5	Diesel-electric Sw.	Whitcomb Locomotive Co.	
FREIGHT CARS					
Nov. 4	Texas & Pacific .....	500	Box	Mt. Vernon Car	
Nov. 4	Tennessee Central .....	65	Hopper	American Car & Foundry	
Nov. 4	Chicago & Illinois Midland .....	50	Hopper	Pullman-Standard	
Nov. 4	U. S. War Dept. ....	125	Tank	American Car & Foundry	
Nov. 4	Youngstown & Northern .....	100	Gondola	Magor Car Corp.	
Nov. 4	Union Railroad .....	60	Air dump	Differential Steel Car	
		40	Air dump	Magor Car Corp.	
Nov. 4	Louisiana & Arkansas .....	100	Box	American Car & Foundry	
Nov. 4	Elgin, Joliet & Eastern .....	600	Twin Hopper	American Car & Foundry	
		50	Cov. Hopper	American Car & Foundry	
Nov. 4	Northern Pacific .....	500	Gondola	Pressed Steel Car	
		50	Hopper	American Car & Foundry	
		100	Hart Ballast	American Car & Foundry	
		50	Hopper	General American	
Nov. 4	Bessemer & Lake Erie .....	1,000	Hopper	Pullman-Standard	
		500	Gondola	Pressed Steel Car	
		500	Box	Greenville Steel Car	
		50	Cov. Hopper	American Car & Foundry	
Nov. 4	Baltimore & Ohio .....	500	Box	Pressed Steel Car	
Nov. 11	Newburgh & South Shore .....	100	Gondola	Magor Car Corp.	
Nov. 11	Utah Copper Co. ....	100	Ore	Pressed Steel Car	
Nov. 11	Elgin, Joliet & Eastern .....	500	Gondola	Mt. Vernon Car	
		300	Hopper	Ralston Steel Car	
		300	Hopper	Pullman-Standard	
		300	Hopper	General American	
Nov. 11	Delaware, Lackawanna & Western .....	500	Hopper	American Car & Foundry	
		100	Gondola	American Car & Foundry	
		500	Box	Magor Car Corp.	
Nov. 18	Philadelphia Quartz Co. ....	10	Tank	American Car & Foundry	
Nov. 18	Pacific Fruit Express .....	25	Refrigerator	Company Shops	
Nov. 25	Phillips Petroleum Co. ....	1	Tank	General American	
		10	Tank	American Car & Foundry	
Dec. 2	Pittsburgh & West Virginia .....	5	Caboose	Company Shops	
DOMESTIC PASSENGER-TRAIN CARS					
Nov. 25	Chicago, North Shore & Milwaukee .....	8		St. Louis Car Co.	



# Railway Officers

## EXECUTIVE

**F. B. Hank**, assistant engineer in the office of the executive vice-president of the New York Central at New York, has been appointed assistant to vice-president and general manager, with the same headquarters.

**George H. Dugan**, whose appointment as assistant to vice-president of the Southern, with headquarters at Washington, D. C., was reported in the *Railway Age* of December 2, was born on January 22,



George H. Dugan

1884, at St. Charles County, Mo. Mr. Dugan entered the service of the Terminal Railroad Association of St. Louis as messenger in December, 1900, and was promoted to yard clerk in June, 1901. From August, 1903, to December, 1904, he was with the St. Louis World's Fair and in January, 1905, entered the service of the Southern at Atlanta, Ga., as transitman in the maintenance of way department. He was transferred to the construction department as assistant engineer in September, 1906, and was appointed engineer maintenance of way, subsidiary lines of the Southern in May, 1920. In November, 1924, Mr. Dugan became vice-president, subsidiary lines, in charge of all departments, in which position he continued until August 1, 1934, when he was appointed, by the railroads, a member of the National Railroad Adjustment Board, at Chicago, from which position he was recalled to the Southern as assistant to vice-president.

## FINANCIAL, LEGAL AND ACCOUNTING

The office of **A. F. Bayfield**, comptroller of the Lehigh Valley, has been transferred from Bethlehem, Pa., to 143 Liberty street, New York.

## OPERATING

**A. L. Sayles** has been appointed assistant superintendent of the Valley branch of the New York Central, with headquarters at Dunkirk, N. Y., succeeding **Harry**

**B. Shoemaker**, who retired on December 1, after 47 years of service.

**George N. Goad**, chief of car service of the Canadian National, with headquarters at Montreal, Que., retired on December 1, after more than 38 years of service.

**W. M. Sporleder** has been appointed chief trainmaster of the Mahoning division of the Erie, with headquarters at Youngstown, Ohio, succeeding **M. G. McInnes**, whose promotion to assistant superintendent at Chicago, was announced in the *Railway Age* of November 11.

**H. B. Budde**, chief clerk to the general manager of the Railway Express Agency at St. Paul, Minn., has been promoted to superintendent of the Lake Superior division, with headquarters at Duluth, Minn., succeeding **C. W. Smith**, who retired on November 1.

**N. N. Bailly**, assistant division superintendent of the Reading, with headquarters at Reading, Pa., has been appointed superintendent of the Reading division, succeeding **J. T. Sturman**, who has been granted a leave of absence at his own request, because of ill health. **L. R. Mumper** has been appointed assistant superintendent of the Reading Division, succeeding Mr. Bailly.

**E. M. Tolleson**, trainmaster on the Southern at Birmingham, Ala., has been transferred to the territory formerly under the jurisdiction of **J. G. Woodall**, with the same headquarters. The promotion of Mr. Woodall to superintendent of terminals at Chattanooga, Tenn., was announced in the *Railway Age* of December 2. **D. E. Clark** has been appointed trainmaster at Birmingham, succeeding Mr. Tolleson and **R. C. Wilson** has been appointed trainmaster at Oakdale, Tenn., replacing **L. L. Waters**.

**Jose Diaz Leal**, superintendent of the Gulf division of the National Railways of Mexico, with headquarters at Monterrey, Nuevo Leon, Mex., has been transferred to the Pacific division, with headquarters at Acambaro, Gto., Mex., succeeding **Atenogenes Munoz Orea**, who has been transferred to the Jalapa division, with headquarters at Jalapa, Vera Cruz, Mex. Mr. Orea replaces **Guillermo Castillo Baez**, who has been transferred to the Puebla division, with headquarters at Puebla, Pue., Mex., replacing **Samuel Sanchez**. Mr. Sanchez, in turn, has been transferred to the Gulf division, with headquarters at Monterrey, succeeding Mr. Leal. **Alberto Bribiesca** has resumed his duties as superintendent of the Torreon division, with headquarters at Torreon, Coah., Mex., replacing **Guadalupe Guerra**, relief superintendent.

**Otto A. Beerman**, whose promotion to superintendent on the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Ottumwa, Iowa, was announced in the *Railway Age* of December 2, was born at Guttenberg, Iowa, on November 5, 1888, and entered railway service in August, 1907, as a telegraph operator on the Dubuque division of the Milwaukee, later being transferred to the Sioux City and Da-

kota division. On April 5, 1915, he was promoted to train dispatcher at Dubuque, Iowa, and on September 15, 1918, he was advanced to chief dispatcher at Mason City, Iowa. Mr. Beerman was promoted to trainmaster at Madison, Wis., on May 15, 1923, and in August, 1926, he was transferred to Mason City. He was transferred to Aberdeen, S. D., on April 1, 1935, and on June 1, 1936, he was promoted to assistant superintendent of the Milwaukee Terminals at Milwaukee, Wis., the position he held until his recent promotion, which was effective December 1.

## TRAFFIC

**G. H. Sloope**, agent for the Railway Express Agency at Charleston, W. Va., has been appointed general agent at Norfolk, Va.

**Harrell L. Perkins**, traveling freight agent on the Central of Georgia at Atlanta, Ga., has been promoted to general industrial agent, with headquarters at Savannah, Ga., a newly created position.

**O. W. Harding**, chief clerk to the superintendent of the Railway Express Agency at Louisville, Ky., has been promoted to general agent at Nashville, Tenn., succeeding **H. G. Allen**, deceased.

**G. D. Wright**, traveling freight agent for the Wabash at Denver, Colo., has been promoted to general agent, freight department, at Tulsa, Okla., succeeding **R. V. Miller**, whose death on November 4 is announced elsewhere in this issue.

**William T. Albrecht**, city passenger agent on the Chicago, Burlington & Quincy at Lincoln, Neb., has been promoted to general agent, passenger department, at that point, succeeding **Henry P. Kauffman**, who retired on December 1.

**L. A. Parker**, chief clerk to the general manager of the Railway Express Agency at Los Angeles has been promoted to general agent at Oakland Cal. succeeding **M. G. Lickteig**, who has been transferred to San Francisco Cal., replacing **W. C. Kiefer**, who has retired.

**E. J. Anderson** has been appointed general agent for the Atlanta, Birmingham & Coast at San Francisco, Cal., succeeding **H. J. Snyder**, general agent at San Francisco and Los Angeles, Cal. The position of general agent at Los Angeles has been abolished and that territory has been assigned to the general agent at San Francisco.

**Charles B. Michelson**, perishable freight agent of the St. Louis-San Francisco, has been appointed director of agricultural development, with headquarters as before at St. Louis, Mo., a newly created position, and **Alby G. Anderson**, general livestock and dairy agent, has been appointed assistant director of agricultural development, also a newly created position, with headquarters as before at Springfield, Mo.

**George L. Oliver**, assistant general passenger agent of the Florida East Coast, with headquarters at Miami, Fla., has been

appointed general passenger agent at St. Augustine, Fla., succeeding **J. D. Rahner**, who has retired at his own request, after more than 47 years of service with this road. Mr. Rahner was born on April 9, 1866, at Augusta, Ga., and entered railroad service in 1887 as assistant ticket agent for the Savannah, Florida & Western (now Atlantic Coast Line) at Savannah, Ga. He served in this capacity until 1888, when he was appointed bill clerk at Jacksonville, Fla. He became chief rate clerk for the Savannah, Florida & Western in 1890 and in 1892 was appointed chief clerk, passenger department, Jacksonville, St. Augustine & Indian River (now Florida East Coast). Mr. Rahner was appointed general passenger agent of the Florida East Coast in 1896, the position he held until his retirement. Mr. Rahner was president of the American Association of Passenger Traffic Officers in 1929.

**Harris B. Smith**, whose appointment as coal traffic manager and fuel agent of the Kansas City Southern and the Louisiana



Harris B. Smith

& Arkansas, with headquarters at Kansas City, Mo., was announced in the *Railway Age* of November 25, was born at Greenleaf, Kan., on April 18, 1883, and studied mining engineering at the University of Kansas. He entered railway service on February 1, 1913, as a rodman on the Atchison, Topeka & Santa Fe on new yard construction at Wichita, Kan., and on May 19, 1914, he went with the Kansas City Southern as a draftsman in the valuation department. Mr. Smith was promoted to chief draftsman in the engineering department on May 15, 1918, and on December 10, 1920, he was appointed fuel agent, holding that position until his recent promotion, which was effective November 1.

#### ENGINEERING AND SIGNALING

**E. M. Lewis**, engineering auditor of the Chicago Great Western, has been promoted to valuation engineer, with headquarters as before at Chicago, succeeding **W. C. Harvey**, who retired on December 1.

**R. E. Oberdorf**, assistant engineer on the New York, Chicago & St. Louis

(Nickel Plate) at Fort Wayne, Ind., has been promoted to assistant district engineer of the Lake Erie & Western district, with headquarters at Frankfort, Ind., succeeding **H. F. Whitmore**, whose promotion to division engineer, with headquarters at Frankfort, was announced in the *Railway Age* of October 14.

**Felix S. Hales**, engineer of track of the New York, Chicago & St. Louis, has been promoted to bridge engineer, with headquarters as before at Cleveland, Ohio, succeeding **George Henry Tinker**, who retired on December 1. The position of engineer of track has been abolished.

**Vicente Espinosa Palomero**, division engineer of the Southeastern division of the National Railways of Mexico, with headquarters at Tierra Blanca, Vera Cruz, Mex., has been transferred to the Puebla division, with headquarters at Puebla, Pue., Mex., succeeding **Pablo Lunez Enriquez**, who has been transferred to the Jalapa division, with headquarters at Jalapa, Vera Cruz, Mex., replacing **Federico Fischer Ibanez**. Mr. Ibanez, in turn, has been transferred to the Southeastern division, with headquarters at Tierra Blanca, relieving Mr. Palomero.

**T. P. Polson**, division engineer on the New York, New Haven & Hartford, with headquarters at Providence, R. I., has been promoted to the newly-created position of engineer of track, with headquarters at New Haven, Conn. **G. P. Elliott**, office assistant to the engineer maintenance of way, with headquarters at New Haven, has been promoted to division engineer, with headquarters at Boston, Mass., to succeed **J. B. Bell**, who has been transferred to Providence, to replace Mr. Polson. **C. D. Prentice**, assistant division engineer at New Haven, has been promoted to office assistant to the engineer maintenance of way, with the same headquarters, to succeed Mr. Elliott, and **S. J. Polson**, assistant division engineer at Providence, has been transferred to New Haven to succeed Mr. Prentice. **H. K. Hislop** has been appointed assistant division engineer at Providence to replace S. J. Polson.

#### SPECIAL

**Frank M. America**, editor and manager of the Erie Magazine, has been appointed also special representative of the chief executive officer in charge of public relations work, with headquarters as before at Cleveland, Ohio.

#### PURCHASES AND STORES

**Thomas E. Savage**, whose promotion to purchasing agent of the Erie, with headquarters at Cleveland, Ohio, was announced in the *Railway Age* of December 2, was born in 1887, and entered railway service 36 years ago as an office boy in the purchasing department of the Erie. Mr. Savage advanced through various positions in that department and in the fall of 1923 he was promoted to assistant to the manager of purchases, with headquarters at New York. On July 16, 1930, he was further advanced to assistant purchas-

ing agent, with the same headquarters, later being transferred to Cleveland, when the Erie moved its general offices to that point. Mr. Savage continued as assistant



Thomas E. Savage

purchasing agent, with headquarters at Cleveland, until his recent promotion, which was effective December 1.

**Frank J. Loughlin**, whose promotion to assistant purchasing agent of the Erie, with headquarters at Cleveland, Ohio, was announced in the *Railway Age* of December 2, was born at Jersey City, N. J., on April 2, 1890, and entered railway service on September 6, 1904, as a messenger in the telegraph department of the Erie. In January, 1905, he was appointed a clerk in the purchasing department and on August 13, 1926, he was promoted to chief clerk. Mr. Loughlin was advanced to as-



Schuyler Studios, Inc.

Frank J. Loughlin

stant to the purchasing agent on July 1, 1939, the position he held until his recent promotion, which was effective December 1.

#### MECHANICAL

**F. H. Winget**, assistant master mechanic on the Cleveland, Cincinnati, Chicago & St. Louis at Bellefontaine, Ohio, has been promoted to master mechanic,



with the same headquarters, succeeding J. J. Karibo, who retired on October 1.

**Martin H. Nelson**, general locomotive foreman on the Northern Pacific, with headquarters at Brainerd, Minn., has been appointed acting shop superintendent at that point, succeeding **H. E. Bergstrom**, who has resigned. **J. Allen Clark**, road foreman of engines at Missoula, Mont., has been promoted to master mechanic at Spokane, Wash., replacing **L. J. Gallagher**.

**C. E. Pond**, assistant master mechanic of the Radford and Shenandoah divisions of the Norfolk & Western, with headquarters at Roanoke, Va., has been appointed assistant to the superintendent of motive power, with the same headquarters. Mr. Pond was graduated in mechanical engineering from the Virginia Polytechnic Institute and entered the service of the Norfolk & Western as a special apprentice in the Roanoke shops in June, 1923. Two months later he was transferred to Portsmouth, Ohio, as shop inspector and served there for two years until August, 1925, when he was promoted to assistant engineer of tests, at Roanoke. In 1928 he was appointed assistant foreman of the frog shop and in January, 1937, assistant foreman of the blacksmith shop, becoming foreman of the latter shop the same year. In 1938 he was promoted to general foreman of foundries, which position he held until June, 1939, when he became assistant master mechanic of the Radford and Shenandoah divisions.

## OBITUARY

**R. V. Miller**, general agent, freight department for the Wabash at Tulsa, Okla., died suddenly of a heart attack at Tulsa on November 4.

**Joe A. Kell**, president of the Missouri & Arkansas, with headquarters at Harrison, Ark., and assistant to the president of the Wichita Falls & Southern, with headquarters at Wichita Falls, Tex., died at the age of 44 in Wichita Falls on November 21, from injuries received in an automobile accident.

**George F. Ancrum**, former treasurer of the Canadian National with headquarters at Montreal, Que., died on November 29 in the Royal Victoria hospital, at the age of 67. Mr. Ancrum was born in Bristol, England, in 1872, and entered the service of the Grand Trunk at Montreal in 1888 as an apprentice in the mechanical accounts department. He became clerk in 1892 and two years later was transferred to the treasurer's department. In 1903 Mr. Ancrum became clerk and relieving paymaster and in 1914, chief clerk in the treasury department. In 1920 Mr. Ancrum was appointed assistant to the treasurer, becoming assistant treasurer two years later. In 1923 he was appointed treasurer at Montreal, which position he held until 1932, when he retired, after more than 44 years of active service.

**Otto Cornelisen**, who retired on June 1, 1937, as division superintendent on the

Kansas City Southern, with headquarters at Pittsburg, Kan., died suddenly at his home in Pittsburg on November 27. Mr. Cornelisen was born at Dubuque, Iowa, on March 18, 1868, and entered railway service on April 1, 1882, as a telegraph operator on the Chicago, Milwaukee, St. Paul & Pacific. In 1887, he went with the Chicago Great Western as an operator and later was advanced successively to trainmaster, superintendent and general superintendent. In May, 1910, Mr. Cornelisen went with the Oregon-Washington Railroad & Navigation Company (now part of the Union Pacific) as a trainmaster, and four months later he became a superintendent on the Kansas City Southern, with headquarters at Pittsburg. In November, 1911, he went with the Virginian as assistant superintendent at Princeton, W. Va., and in September, 1912, he returned to the K. C. S. as division superintendent at Pittsburg, the position he held until his retirement.

**Victor D. Thayer**, superintendent of car service of the Delaware, Lackawanna & Western, with headquarters at Scranton, Pa., died on December 2 in the Moses Taylor hospital, Scranton, at the age of 56. Mr. Thayer was born on March 6, 1883, and entered the service of the Lackawanna as an office boy in the car service department at Scranton. From March, 1901, to March, 1916, he served successively as record clerk, reclaim clerk, statistics clerk, traveling car agent, chief clerk-car demurrage, and assistant chief clerk of the car service department. In January, 1917, Mr. Thayer left the service of the Lackawanna to become chief clerk and car accountant of the Lehigh Valley which position he held until July, 1918. A month later he joined the U. S. Railroad Administration forces at Washington, D. C., where he served until October, 1918. In November, 1918, he re-entered Lackawanna service in the office of the vice-president and general manager at New York. Mr. Thayer was transferred to Scranton as car accountant on December 1, 1919, and became car service agent on April 1, 1923. He was promoted to superintendent of car service on February 1, 1935, the position he held until his death.

**Frank M. Whitaker**, retired vice-president in charge of traffic of the Chesapeake & Ohio, the Pere Marquette and the New York, Chicago & St. Louis (Nickel Plate), whose death on October 25, at Spokane, Wash., was announced in the *Railway Age* of November 4, was born in Clermont County, Ohio, on September 9, 1867, entered railroad service in 1881, as a clerk in the office of the division freight agent of the Pennsylvania at Cincinnati, Ohio. On August 1, 1885, he went with the C. & O., as a clerk in the agent's office at Cincinnati and later became successively chief clerk to the general western freight agent, general western freight agent, assistant freight traffic manager and freight traffic manager. On January 1, 1910, he was elected vice-president in charge of traffic of the C. & O., and the Hocking Valley. During the period of government control of the railroads, Mr. Whitaker served as manager of inland traffic with

the Railroad Administration and in 1920 he returned to his former position on the C. & O. On February 1, 1932, he was elected also vice-president in charge of traffic on the Pere Marquette and on February 21, 1933, vice-president in charge of traffic of the Nickel Plate. He was elected also a director of the Nickel Plate on May 2, 1934. Mr. Whitaker retired on July 1, 1937.

**E. J. Flanagan**, superintendent of organization in the president's office of the Railway Express Agency at New York, who died on October 14, at St. Mary's Hospital, Grand Rapids, Mich., after a short illness, was born in Ireland. He entered the express business on November 1, 1891, at Toledo, Ohio, serving in various capacities until August, 1901, when he was appointed agent. Mr. Flanagan then served as route agent at Alliance, Ohio, and in November, 1907, was appointed chief clerk to the superintendent at Columbus, serving as acting superintendent in 1914-1915. On April 1, 1915, he became superintendent at Chicago, and effective with the wartime consolidation of the express companies on July 1, 1918, he went to Grand Rapids, Mich., as superintendent, a position he occupied for 18 years. On January 1, 1937, Mr. Flanagan became superintendent of organization for the Central departments, at Chicago, and two years later was transferred to the executive offices in New York, to serve in the same capacity for the entire system, reporting directly to the president.

**Charles M. Heald**, founder and first president of the Pere Marquette and at one time president of the New York, Susquehanna & Western, died in Los Angeles on December 1, at the age of 90. Mr. Heald was born in Baltimore, Md. on July 5, 1849, and graduated from Yale University in 1870. He entered railway service in November, 1872, as a clerk to the master of transportation on the Baltimore & Ohio, later becoming an agent and general agent. On January 1, 1878, he became cashier to the receiver of the Long Island Railroad and on October 1, 1879, he was made cashier and general ticket agent. From July 1, 1881 to January 1, 1887, he served in the freight department of the B. & O., returning to the Long Island on the latter date as general traffic manager. Mr. Heald became assistant to the general manager and general freight agent on the Philadelphia & Reading (now the Reading) on February 15, 1887, and on January 1, 1889, he was elected president of the New York, Susquehanna & Western. Mr. Heald became general manager of the Chicago & West Michigan and the Detroit, Lansing & Northern (both now parts of the Pere Marquette), with headquarters at Grand Rapids, Mich., on March 1, 1890, and on November 3, 1899, when the Pere Marquette was organized he was elected president, with headquarters at Detroit, Mich. He resigned this position in the latter part of 1902, and later became president and general manager of the Mutual Transit Company at Buffalo, N. Y., heading the merger of that company with the Great Lakes Steamship Lines. Mr. Heald retired in 1919 and since that time has lived in Pasadena, Cal.

## REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1939

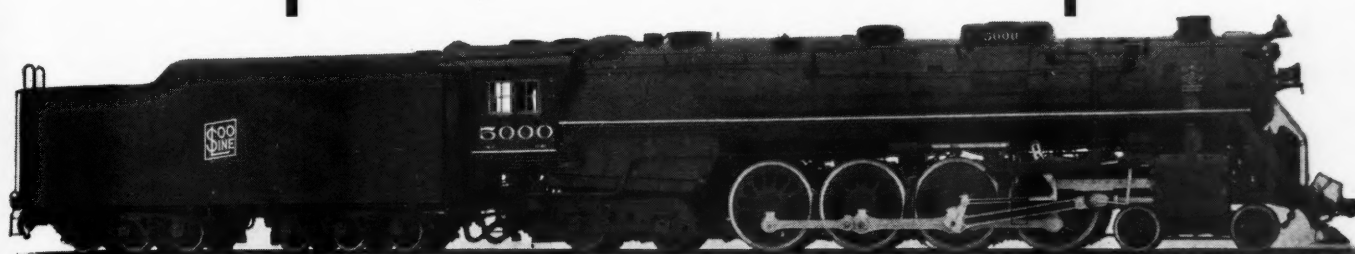
Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total	Way and structures	Traffic	Portation			1939	1938
Alton, Canton & Youngstown	171	\$208,944	\$36	\$209,080	\$28,123	\$14,788	\$63,098	66.4	\$73,698	\$61,834	\$71,698
Alton	171	1,607,302	336	1,610,638	230,118	130,911	326,987	69.2	1,313,414	1,279,751	1,279,751
Alton	959	1,605,048	227,882	1,832,930	200,410	246,884	386,934	69.2	1,586,046	1,542,892	1,542,892
Alton	959	9,726,503	2,086,928	11,813,431	1,879,236	472,439	5,430,383	73.8	3,321,957	2,371,623	610,062
Archison, Topeka & Santa Fe System	13,447	13,785,363	1,404,999	15,190,362	2,327,978	504,282	5,224,094	69.4	5,059,386	3,248,982	2,804,790
Atlanta & West Point	13,458	106,073,913	15,471,295	121,545,208	19,763,879	4,582,213	47,648,371	78.4	28,688,337	15,625,482	14,056,033
Atlanta & West Point	93	139,787	24,385	164,172	19,384	7,609	69,221	72.7	51,534	41,688	16,684
Atlanta & West Point	93	1,052,227	239,242	1,291,469	178,196	79,998	650,527	84.5	234,384	137,380	108,269
Western of Alabama	133	140,684	24,162	164,846	17,286	7,884	63,885	68.7	58,152	38,377	39,175
Atlanta, Birmingham & Coast	639	2,861,600	5,669	2,867,269	43,825	22,083	114,432	80.6	60,016	37,059	20,885
Atlanta, Birmingham & Coast	639	2,531,201	178,785	2,709,986	426,799	237,437	1,159,138	86.3	398,757	169,621	62,488
Atlantic Coast Line	5,104	2,973,852	309,857	3,283,709	394,595	138,892	1,450,135	79.5	761,506	461,506	371,851
Charleston & Western Carolina	5,106	2,973,852	309,857	3,283,709	413,609	150,183	1,515,088	77.5	878,318	493,318	3,003,273
Charleston & Western Carolina	343	214,801	1,206	216,007	40,063	8,044	7,401	74.6	25,561	35,981	32,561
Charleston & Western Carolina	343	2,014,290	10,056	2,024,346	268,503	87,754	683,556	67.9	668,899	438,899	411,155
Baltimore & Ohio	6,389	15,450,053	925,233	16,375,286	1,608,763	410,809	5,393,198	68.4	5,451,938	4,491,130	4,037,755
Staten Island Rapid Transit	6,397	113,113,833	9,102,462	122,216,295	12,388,192	3,935,641	46,539,658	74.3	33,501,285	24,633,223	20,626,698
Staten Island Rapid Transit	24	550,385	718,341	1,268,726	1,016	1,016	77,178	89.7	30,156	665	9,167
Bangor & Aroostook	603	333,788	11,343	345,131	64,426	5,795	109,674	76.5	85,545	47,475	73,463
Besemer & Lake Erie	603	3,970,479	151,616	4,122,095	838,406	59,093	1,959,947	75.1	1,072,482	674,996	748,418
Besemer & Lake Erie	224	1,899,851	689	1,900,540	107,631	13,425	249,569	35.3	1,247,042	950,033	1,009,252
Besemer & Lake Erie	224	10,827,811	7,396	10,835,207	1,054,094	126,754	1,838,762	54.9	4,950,744	3,710,692	3,977,558
Boston & Maine	1,937	3,394,858	541,440	3,936,298	501,172	68,441	1,581,700	66.0	1,527,482	1,211,811	946,571
Burlington, Rock Island	1,942	27,351,778	5,947,299	33,299,077	5,180,960	688,521	15,920,789	71.6	10,871,431	7,815,706	5,337,605
Burlington, Rock Island	255	1,272,255	16,901	1,289,156	23,150	5,100	51,177	73.4	40,660	42,065	20,645
Burlington, Rock Island	255	877,183	179,778	1,056,961	168,197	47,843	306,428	90.0	113,009	29,637	38,841
Cambria & Indiana	37	149,499	.....	149,499	8,682	426	13,872	67.26	48,976	25,131	94,159
Canadian Pacific Lines in Maine	37	1,147,428	.....	1,147,428	76,832	4,113	114,225	65.42	397,108	125,424	745,896
Canadian Pacific Lines in Maine	234	1,331,018	8,842	1,339,860	22,944	9,627	56,631	78.4	33,194	23,358	12,785
Canadian Pacific Lines in Maine	234	1,582,863	141,271	1,724,134	363,507	100,343	678,900	83.4	307,088	203,169	37,714
Canadian Pacific Lines in Vermont	91	89,155	6,994	96,149	12,853	3,475	64,582	103.9	4,132	12,187	31,455
Central of Georgia	91	626,636	93,962	720,598	152,199	37,854	607,410	129.0	238,216	307,563	491,356
Central of Georgia	1,871	1,233,202	83,980	1,317,182	1,440,451	53,393	569,510	79.4	296,490	183,313	190,285
Central of Georgia	1,871	10,429,135	980,965	11,410,100	1,697,204	522,633	5,494,708	86.9	1,677,710	580,456	494,194
Central of New Jersey	710	2,893,769	377,480	3,271,249	562,146	43,739	1,218,972	60.3	1,380,008	880,520	688,879
Central Vermont	422	457,331	3,744,124	4,191,455	2,314,377	466,929	11,177,566	72.9	7,453,734	3,254,806	1,497,417
Central Vermont	427	3,938,629	363,800	4,302,429	66,733	11,108	227,610	73.6	137,286	118,727	75,482
Chesapeake & Ohio	3,121	13,054,793	262,281	13,317,074	1,003,548	203,909	2,794,216	46.8	7,343,523	5,643,923	5,717,762
Chicago & Eastern Illinois	3,112	90,892,232	2,554,536	93,446,768	9,036,863	2,051,631	33,322,033	58.4	40,392,460	29,167,698	28,972,622
Chicago & Eastern Illinois	927	1,348,241	101,330	1,449,571	167,535	56,556	530,133	61.9	617,916	542,916	414,008
Chicago & Eastern Illinois	927	9,907,092	1,166,971	11,074,063	1,551,217	545,297	4,956,361	78.0	2,777,137	2,003,137	695,988
Chicago & Illinois Midland	131	385,210	601	385,811	48,169	19,814	88,489	60.1	164,943	123,633	122,657
Chicago & North Western	8,329	2,683,247	866,517	3,549,764	393,756	194,282	751,691	70.6	911,638	627,128	691,899
Chicago & North Western	8,353	55,953,388	9,608,029	65,561,417	11,814,673	2,007,260	28,911,343	68.8	3,142,055	2,698,711	2,385,844
Chicago, Burlington & Quincy	9,034	8,523,235	762,568	9,285,803	1,046,778	241,741	3,230,518	63.1	3,700,383	2,952,604	2,597,234
Chicago Great Western	8,964	63,496,913	7,366,486	70,863,399	11,447,403	2,445,501	28,350,246	75.0	19,867,719	12,638,040	8,944,883
Chicago Great Western	1,505	1,647,240	38,214	1,685,454	204,186	59,181	598,135	63.1	670,339	553,105	316,534
Chicago Great Western	1,505	13,595,653	397,438	13,993,091	1,956,495	588,079	5,533,636	72.2	4,163,190	3,191,391	1,260,681
Chicago, Indianapolis & Louisville	549	882,220	39,096	921,316	77,097	29,956	312,021	60.8	312,228	360,746	276,958
Chicago, Indianapolis & Louisville	549	6,594,272	439,361	7,033,633	816,089	301,841	3,076,714	81.1	1,461,899	1,100,589	184,072

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Chicago, Indianapolis & Louisville .....Oct.  
 10 mos.  
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# INCREASED CAPACITY is the PROFITABLE SOLUTION . . . to the coming increase in tonnage



4-8-4 type locomotive built by Lima for the Soo Line

When the impending deluge of increased freight tonnage arrives, old power with its low hauling capacity will be incapable of meeting the demands of heavier loads hauled at higher speeds. Prepare now! Consult with Lima Engineers in designing profitable, super-power that will take you through the toughest of schedules . . . quickly . . . and economically.

Take advantage of Lima's years of experience, special construction methods, and precision jigs and fixtures that have helped earn Lima's reputation as a builder of . . . Profit Producing Super-Power.



LIMA LOCOMOTIVE WORKS INCORPORATED, LIMA, OHIO

## REVENUES AND EXPENSES OF RAILWAYS

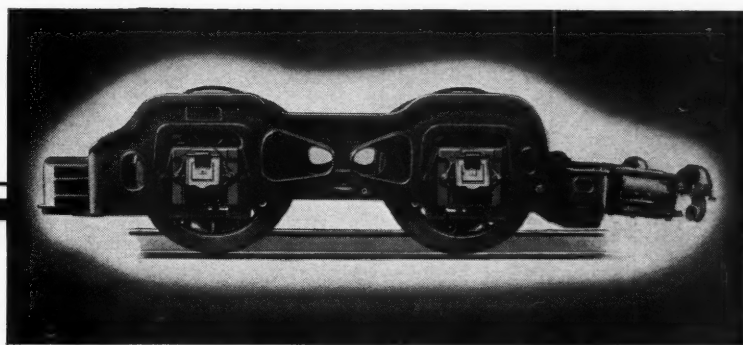
MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR—CONTINUED

Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income				
		Freight	Passenger (inc. misc.)	Total	Maintenance of way and structures	Equip-ment	Traffic			Trans-portion	Total	Operating income	1939	1938
Chicago, Milwaukee, St. Paul & Pacific	10 mos. Oct.	\$10,800	\$9,603,348	\$585,001	\$11,241,952	\$1,756,120	\$1,680,230	\$218,355	\$3,708,230	\$7,723,460	68.7	\$2,822,492	\$2,319,812	\$1,158,445
Chicago, Rock Island & Pacific	10 mos. Oct.	1,026	71,499,145	6,562,258	78,061,403	16,200,958	16,491,612	2,289,576	33,445,804	72,044,254	81.3	9,500,797	5,279,839	3,271,025
Including Chicago, Rock Island & Gulf	10 mos.	7,871	53,687,587	6,328,292	60,015,879	10,510,139	12,115,045	2,531,093	24,850,219	52,854,506	80.4	12,890,182	4,298,018	1,473,268
Chicago, St. Paul, Minneapolis & Omaha	10 mos. Oct.	1,629	12,542,263	1,191,546	14,686,523	2,276,475	2,543,062	391,340	6,640,394	12,506,255	85.1	2,180,268	1,400,382	—308,847
Clinchfield Railroad	10 mos. Oct.	308	735,476	32,371	767,847	41,826	116,990	18,466	2,147,703	2,893,682	49.3	2,975,000	2,434,022	1,727,413
Colorado & Southern	10 mos. Oct.	787	575,094	30,511	605,605	60,391	109,756	15,316	239,343	451,197	68.4	208,411	131,897	106,342
Fort Worth & Denver City	10 mos. Oct.	902	532,358	53,023	585,381	563,956	1,042,763	138,563	2,053,394	4,062,077	75.7	1,302,019	538,931	364,219
Columbus & Greenville	10 mos. Oct.	902	4,564,076	500,191	5,064,267	802,425	82,095	18,819	189,266	3,864,457	67.5	1,861,511	1,452,488	102,936
Delaware & Hudson	10 mos. Oct.	168	130,873	7,525	145,926	30,826	17,786	4,640	42,980	107,513	73.7	38,413	28,030	26,827
Delaware, Lackawanna & Western	10 mos. Oct.	845	2,615,052	87,230	2,702,282	263,759	378,292	45,292	875,638	1,637,333	58.7	1,152,838	907,596	884,613
Denver & Rio Grande Western	10 mos. Oct.	839	19,132,426	1,058,957	21,037,847	2,180,141	3,534,000	432,265	7,468,413	14,428,768	68.6	6,609,079	4,867,848	2,427,825
Denver & Salt Lake	10 mos. Oct.	996	3,962,620	550,217	5,011,621	227,784	850,811	107,814	2,033,607	3,363,879	67.1	1,647,742	1,217,242	1,173,677
Detroit & Mackinac	10 mos. Oct.	232	1,716,975	57,208	1,865,663	316,414	407,564	25,553	570,497	1,411,988	75.7	453,675	172,365	595,981
Detroit & Toledo Shore Line	10 mos. Oct.	242	95,189	1,940	104,866	112,407	143,267	9,283	245,894	538,782	59.6	42,370	38,887	47,896
Detroit, Toledo & Ironton	10 mos. Oct.	50	332,768	.....	332,768	25,140	27,260	8,829	89,772	158,289	47.4	175,538	146,454	88,833
Duluth, Missabe & Iron Range	10 mos. Oct.	541	2,589,319	808	3,005,716	219,748	203,215	3,846	462,476	917,425	30.5	2,088,291	1,800,233	683,085
Duluth, Winnipeg & Pacific	10 mos. Oct.	1,751	14,054,083	15,889	16,351,408	1,774,412	2,146,656	42,075	2,876,263	7,166,119	43.8	9,181,289	7,044,100	2,203,906
Elgin, Joliet & Eastern	10 mos. Oct.	390	1,769,274	.....	1,769,274	127,223	259,396	13,745	657,989	1,088,759	52.8	974,276	630,518	270,743
Erie	10 mos. Oct.	2,290	7,825,074	380,614	8,205,688	1,400,063	2,170,385	141,976	5,238,088	9,907,536	70.9	4,058,801	2,699,433	467,280
Florida East Coast	10 mos. Oct.	685	4,421,194	83,709	5,911,128	110,399	162,601	23,139	199,931	544,103	92.0	47,025	—7,599	—37,728
Georgia Railroad	10 mos. Oct.	329	3,445,195	115,066	3,103,453	334,280	527,093	185,637	1,313,569	2,498,463	80.5	1,770,928	542,940	839,645
Georgia & Florida	10 mos. Oct.	408	96,750	1,754	102,576	22,998	16,031	8,208	37,246	89,608	87.4	12,968	4,879	505
Grand Trunk Western	10 mos. Oct.	1,029	1,921,768	68,367	2,338,179	2,150,150	416,639	39,080	856,430	1,640,016	76.7	498,163	371,888	150,352
Canadian National Lines in New England	10 mos. Oct.	1,030	15,446,704	848,197	17,526,921	2,272,550	3,697,893	415,523	7,586,261	14,735,361	84.1	2,791,560	1,557,273	—1,303,699
Great Northern	10 mos. Oct.	8,072	67,879,688	3,696,507	77,812,867	9,763,059	13,068,077	1,922,966	23,836,562	51,133,819	65.7	26,679,048	17,992,287	16,481,492
Green Bay & Western	10 mos. Oct.	234	1,667,668	753	1,732,266	38,180	21,781	6,659	54,518	125,354	72.3	47,872	31,591	20,588
Gulf & Ship Island	10 mos. Oct.	259	3,902,185	4,147	4,147,332	261,060	164,571	64,240	474,913	1,009,571	71.3	405,115	266,776	140,723
Gulf, Mobile & Northern	10 mos. Oct.	824	650,362	191,542	841,904	23,278	11,491	2,355	47,614	88,248	85.6	14,818	—2,058	—9,429
	10 mos. Oct.	824	5,283,809	191,542	5,709,109	221,257	157,136	25,338	472,253	916,136	95.1	47,395	—121,368	—203,017
	10 mos. Oct.	824	5,283,809	191,542	5,709,109	221,257	157,136	25,338	472,253	916,136	95.1	47,395	—121,368	—203,017
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	10 mos. Oct.	824	5,283,809	191,542	5,709,109	221,257	157,136	25,338	472,253	916,136	95.1	47,395	—121,368	—203,017
	10 mos. Oct.	824	5,283,809	191,542	5,709,109	221,257	157,136	25,338	472,253	916,136	95.1			

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**Your present equipment  
*Can* meet the sudden  
increase in traffic if  
you supplement it with  
**BOOSTER\* POWER****



\*Trademark Registered United States Patent Office

The continued increase in traffic may soon exceed your power capacity. More tonnage requires more power. The Locomotive Booster is the quickest and cheapest way to get it. » » » Capitalize idle weight and spare steam by the Booster and make everything else more productive.



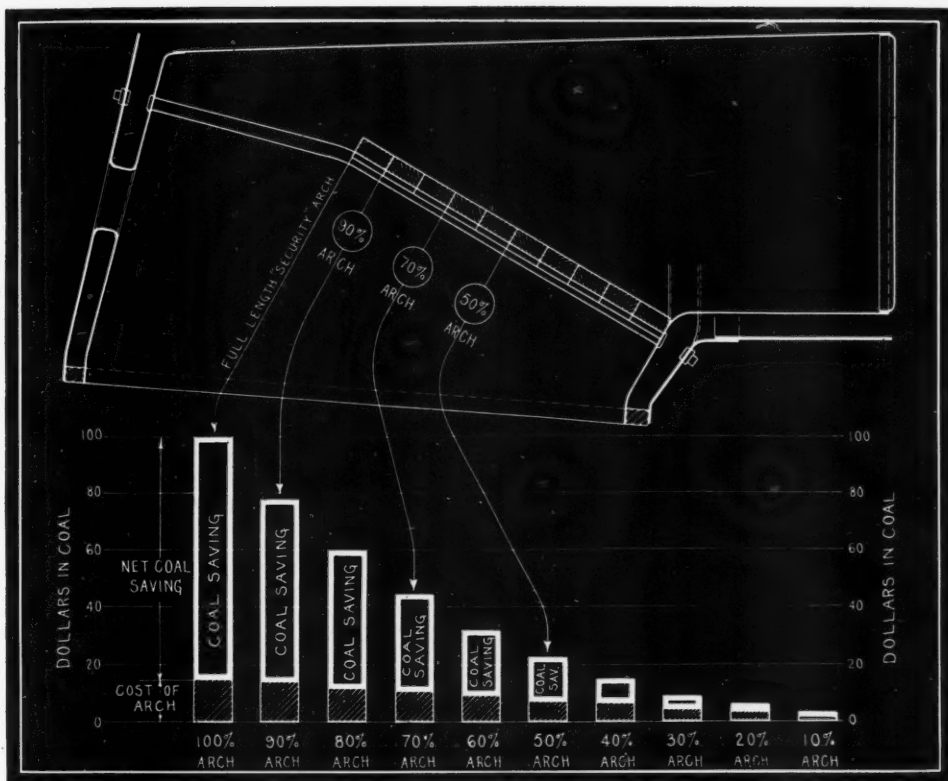
**FRANKLIN RAILWAY SUPPLY COMPANY, INC.**

**NEW YORK  
CHICAGO  
MONTREAL**

December 9, 1939







THE EFFECT OF ABBREVIATED ARCHES ON FUEL SAVING

## LET THE ARCH HELP YOU SAVE

With the emphasis being placed on saving every railroad dollar, the locomotive Arch becomes increasingly important.

Regardless of the amount of traffic handled, the locomotive Arch saves enough fuel to pay for itself ten times over.

Be sure that every locomotive leaving the roundhouse has its Arch complete with not a single brick nor a single course missing.

In this way, you will get more work for each dollar of fuel expense. Skimping on Arch Brick results in a net loss to the railroad.

THERE'S MORE TO SECURITY ARCHES THAN JUST BRICK

**HARBISON-WALKER  
REFRACTORIES CO.**  
*Refractory Specialists*



**AMERICAN ARCH CO.  
INCORPORATED**  
60 EAST 42nd STREET, NEW YORK, N. Y.  
*Locomotive Combustion  
Specialists*

# REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR—CONTINUED

Name of road	Av. mileage operated during period	Operating revenues			Operating expenses			Operating ratio	Net from railway operation	Net railway operating income	
		Freight	Passenger	Total (inc. misc.)	Way and structures	Maintenance of equipment	Traffic			Operating income	1938
Montour	51	\$214,799	443	64,849	11,338	3,033	1,225	10.867	33,277	22,868	24,538
Nashville, Chattanooga & St. Louis	54	1,592,822	7,914	537,962	82,628	35,779	12,261	101,656	282,033	141,726	19,734
	10 mos.	1,592,822	7,914	537,962	82,628	35,779	12,261	101,656	282,033	141,726	19,734
Nevada Northern	1,111	1,216,903	88,284	12,394,964	1,371,977	2,262,090	642,560	4,683,381	9,515,929	2,058,659	1,821,049
	10 mos.	1,216,903	88,284	12,394,964	1,371,977	2,262,090	642,560	4,683,381	9,515,929	2,058,659	1,821,049
New York Central	165	59,499	443	64,849	11,338	3,033	1,225	10.867	33,277	22,868	24,538
	10 mos.	59,499	443	64,849	11,338	3,033	1,225	10.867	33,277	22,868	24,538
Pittsburgh & Lake Erie	11,025	26,377,495	4,893,667	35,171,438	3,530,821	6,611,541	605,564	11,816,484	23,790,821	7,064,476	4,040,980
	10 mos.	26,377,495	4,893,667	35,171,438	3,530,821	6,611,541	605,564	11,816,484	23,790,821	7,064,476	4,040,980
New York, Chicago & St. Louis	233	2,253,727	39,719	2,353,870	132,945	732,393	28,882	588,940	1,561,787	539,023	771,421
	10 mos.	2,253,727	39,719	2,353,870	132,945	732,393	28,882	588,940	1,561,787	539,023	771,421
New York, New Haven & Hartford	1,704	4,589,265	61,575	4,772,484	382,521	617,848	124,076	1,383,335	2,623,700	1,832,423	2,538,117
	10 mos.	4,589,265	61,575	4,772,484	382,521	617,848	124,076	1,383,335	2,623,700	1,832,423	2,538,117
New York Connecting	1,874	4,863,086	2,360,916	8,010,755	1,049,287	1,216,256	102,713	2,679,926	5,425,289	2,079,466	1,119,300
	10 mos.	4,863,086	2,360,916	8,010,755	1,049,287	1,216,256	102,713	2,679,926	5,425,289	2,079,466	1,119,300
Norfolk & Western	576	405,018	2,986	447,358	51,826	98,565	17,272	246,413	434,037	13,321	53,248
	10 mos.	405,018	2,986	447,358	51,826	98,565	17,272	246,413	434,037	13,321	53,248
Norfolk Southern	146	4,474,094	310,570	5,213,677	581,036	1,090,797	164,988	2,645,501	4,707,948	505,729	1,802
	10 mos.	4,474,094	310,570	5,213,677	581,036	1,090,797	164,988	2,645,501	4,707,948	505,729	1,802
Norfolk & Western	145	2,205,661	185,698	2,500,841	231,248	272,778	34,704	987,880	1,662,667	74,996	51,603
	10 mos.	2,205,661	185,698	2,500,841	231,248	272,778	34,704	987,880	1,662,667	74,996	51,603
Norfolk Southern	2,191	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
Norfolk Southern	2,191	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
Norfolk Southern	2,191	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
Norfolk Southern	2,191	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
Norfolk Southern	2,191	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
Norfolk Southern	2,191	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
Norfolk Southern	2,191	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
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	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
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	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
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	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
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	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988
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	10 mos.	10,311,457	155,808	10,712,781	846,462	1,604,462	143,176	1,933,548	4,723,163	5,989,618	3,819,988



# An Economical Boiler Feed

## —the *Elesca* Exhaust Steam Injector

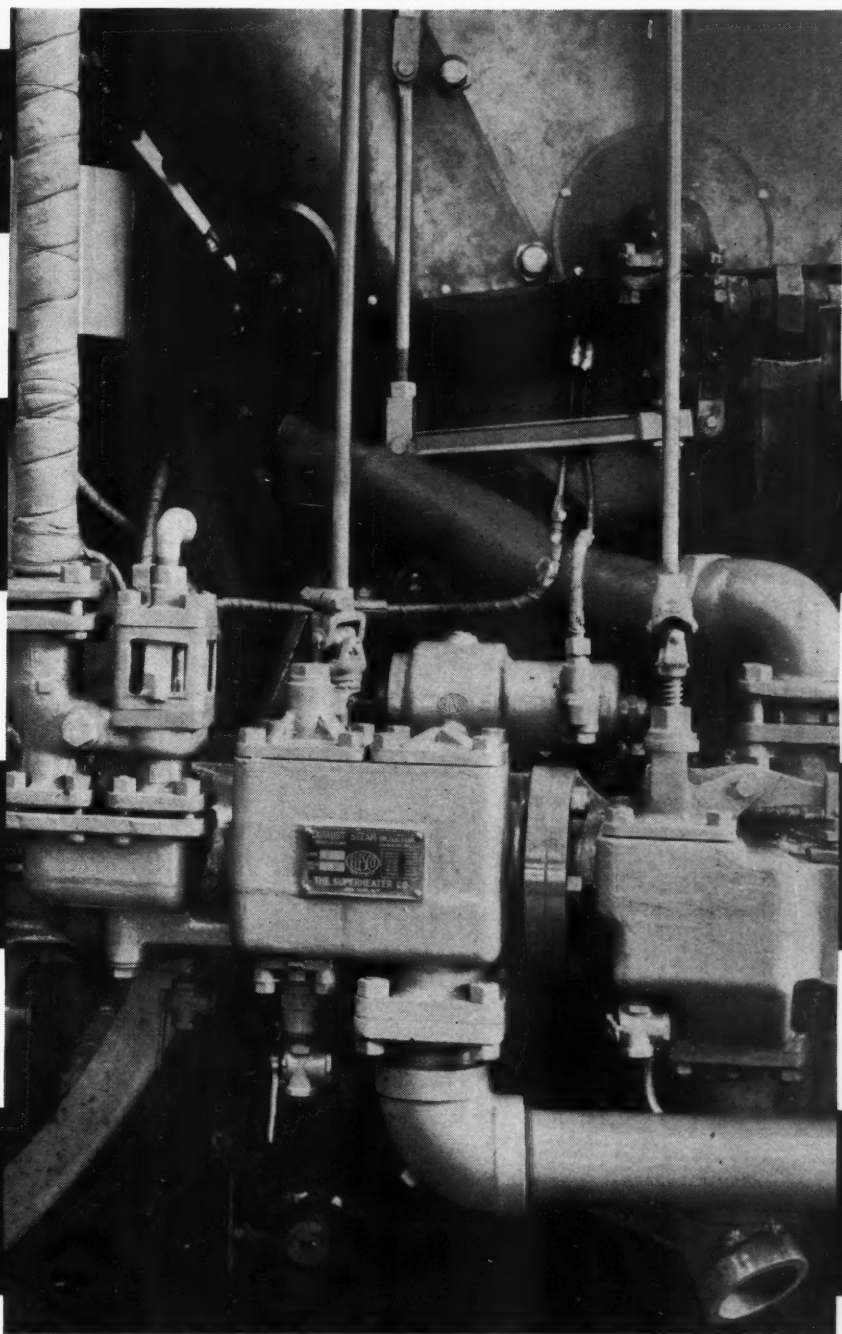
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